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PATENT & TRADEMARK OFFICE

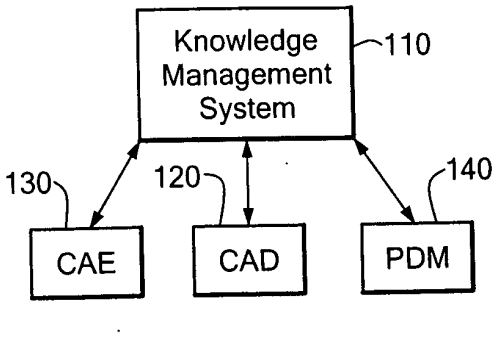


FIG. 1

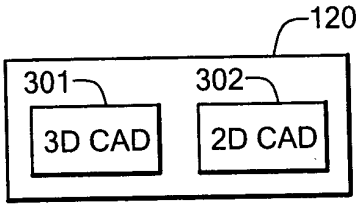


FIG. 3A

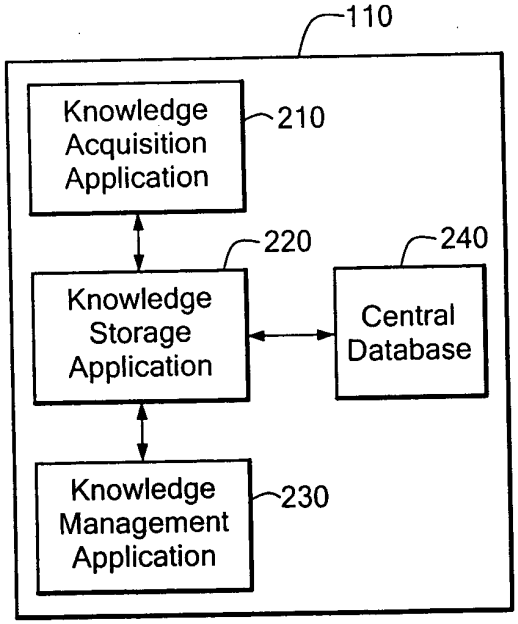


FIG. 2

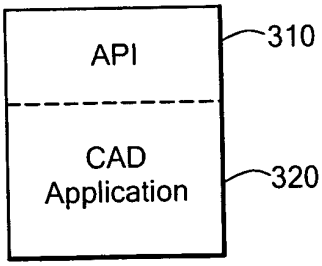


FIG. 3B

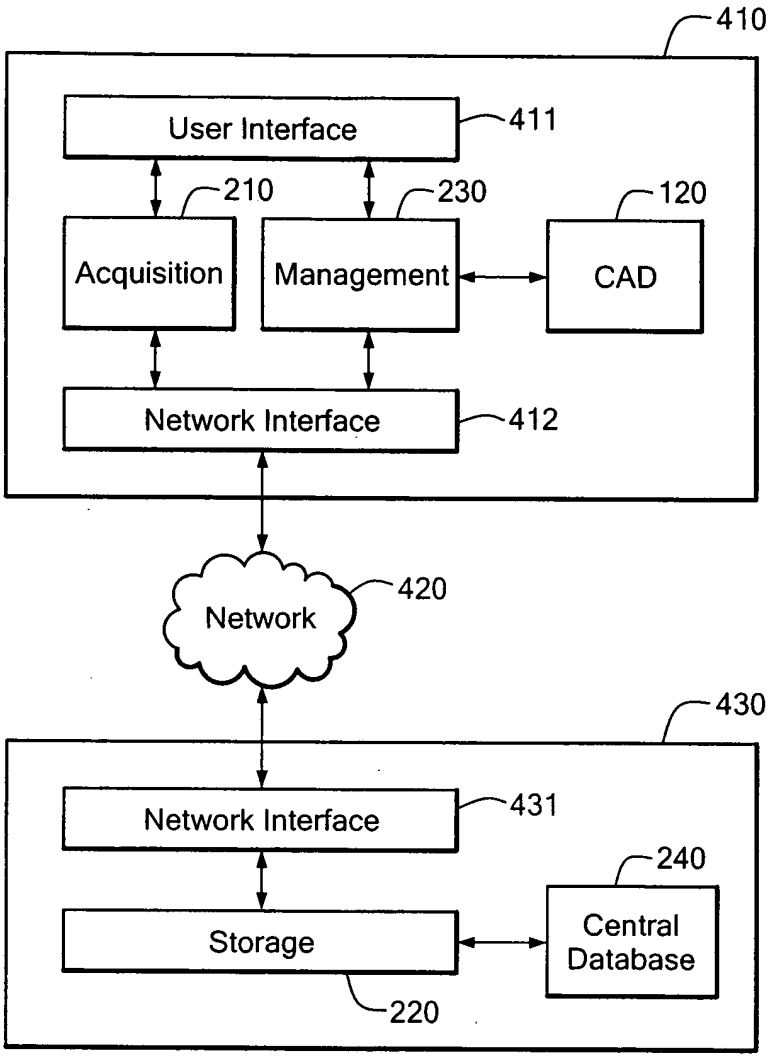

410
User Interface
411
210
230
120
Acquisition
Management
CAD
Network Interface
412
Network
420
430
Network Interface
431
240
Storage
Central Database
220
400

FIG. 4

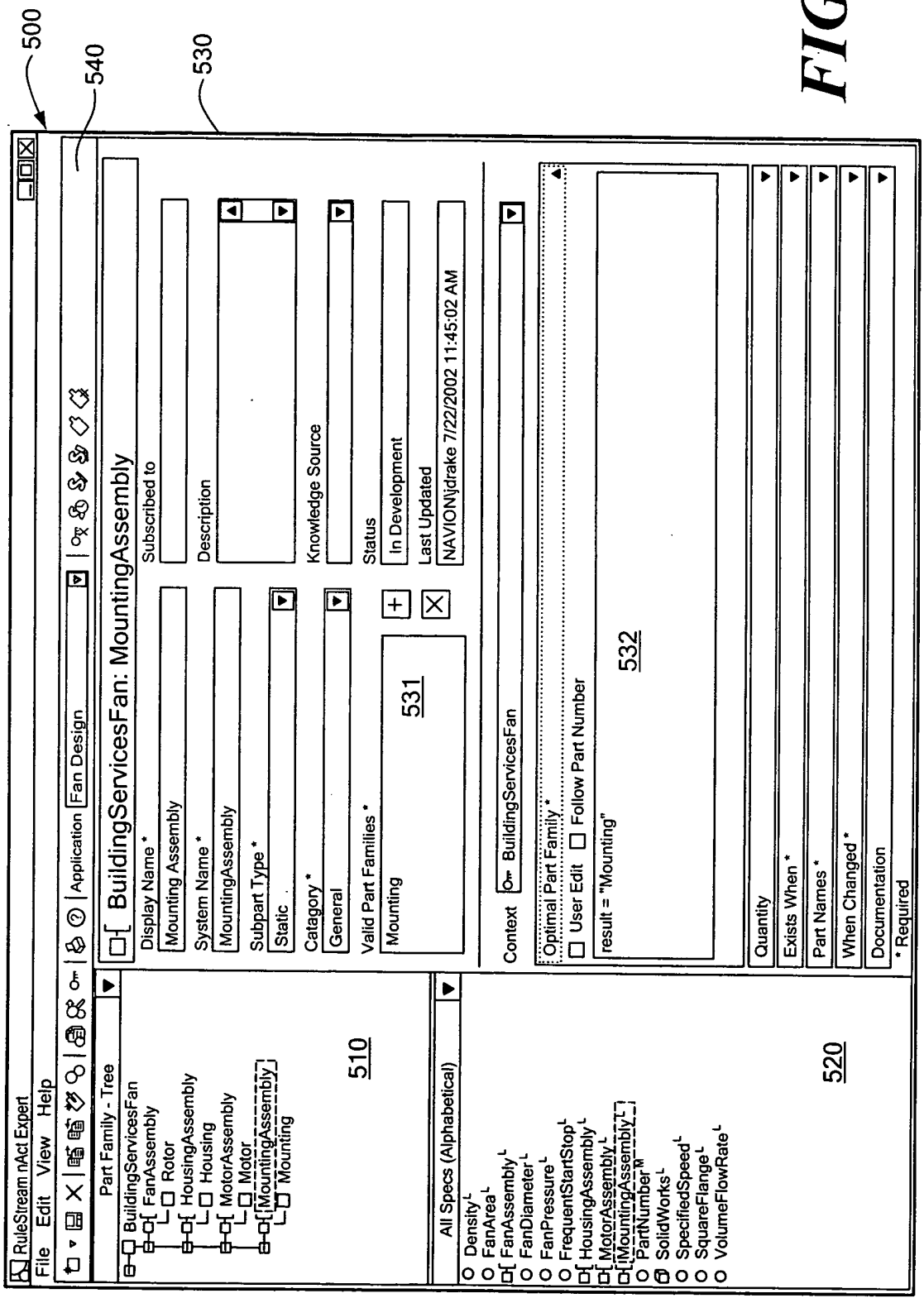

500
540
530
RuleStream nAct Expert
File Edit View Help
Application
Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
510
BuildingServicesFan: MountingAssembly
Display Name *
Mounting Assembly
System Name *
MountingAssembly
Subpart Type *
Static
Catagory *
General
Valid Part Families *
Mounting
531
Subscribed to
Description
Knowledge Source
Status
In Development
Last Updated
NAVIONjdrake 7/22/2002 11:45:02 AM
Context
BuildingServicesFan
Optimal Part Family *
User Edit
Follow Part Number
result = "Mounting"
532
Quantity
Exists When *
Part Names *
When Changed *
Documentation
* Required
All Specs (Alphabetical)
Density
FanArea
FanAssembly
FanDiameter
FanPressure
FrequentStartStop
HousingAssembly
MotorAssembly
MountingAssembly
PartNumber
SolidWorks
SpecifiedSpeed
SquareFlange
VolumeFlowRate
520

FIG. 5

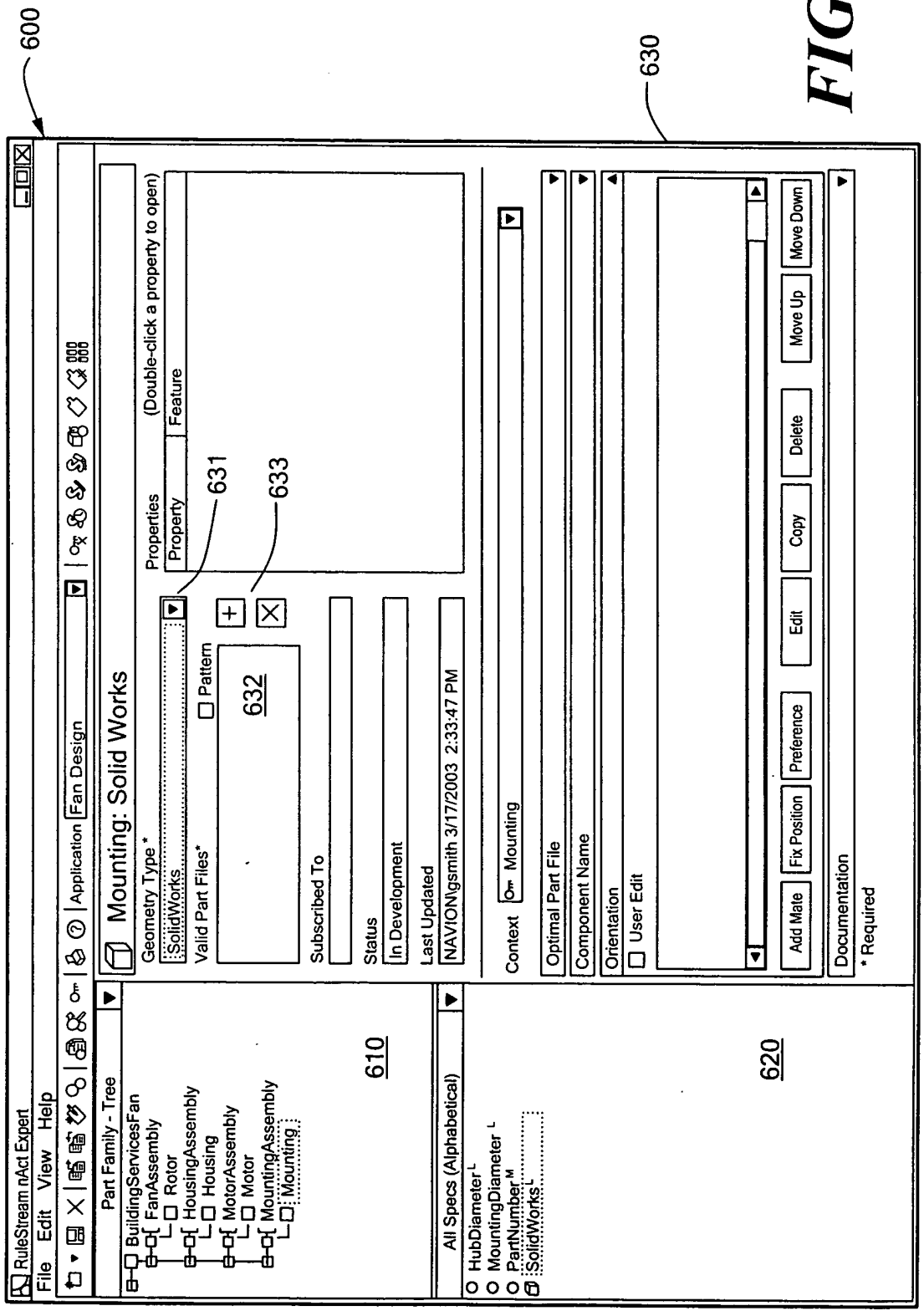

600
RuleStream nAct Expert
File Edit View Help
Application
Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
610
All Specs (Alphabetical)
HubDiameter L
MountingDiameter L
PartNumber M
SolidWorks L
620
Mounting: Solid Works
Geometry Type *
SolidWorks
Valid Part Files*
Pattern
632
Subscribed To
Status
In Development
Last Updated
NAVIONIgsmith 3/17/2003 2:33:47 PM
Properties
(Double-click a property to open)
Property
Feature
631
633
Context
Mounting
Optimal Part File
Component Name
Orientation
User Edit
Add Mate
Fix Position
Preference
Edit
Copy
Delete
Move Up
Move Down
Documentation
* Required
630

FIG. 6

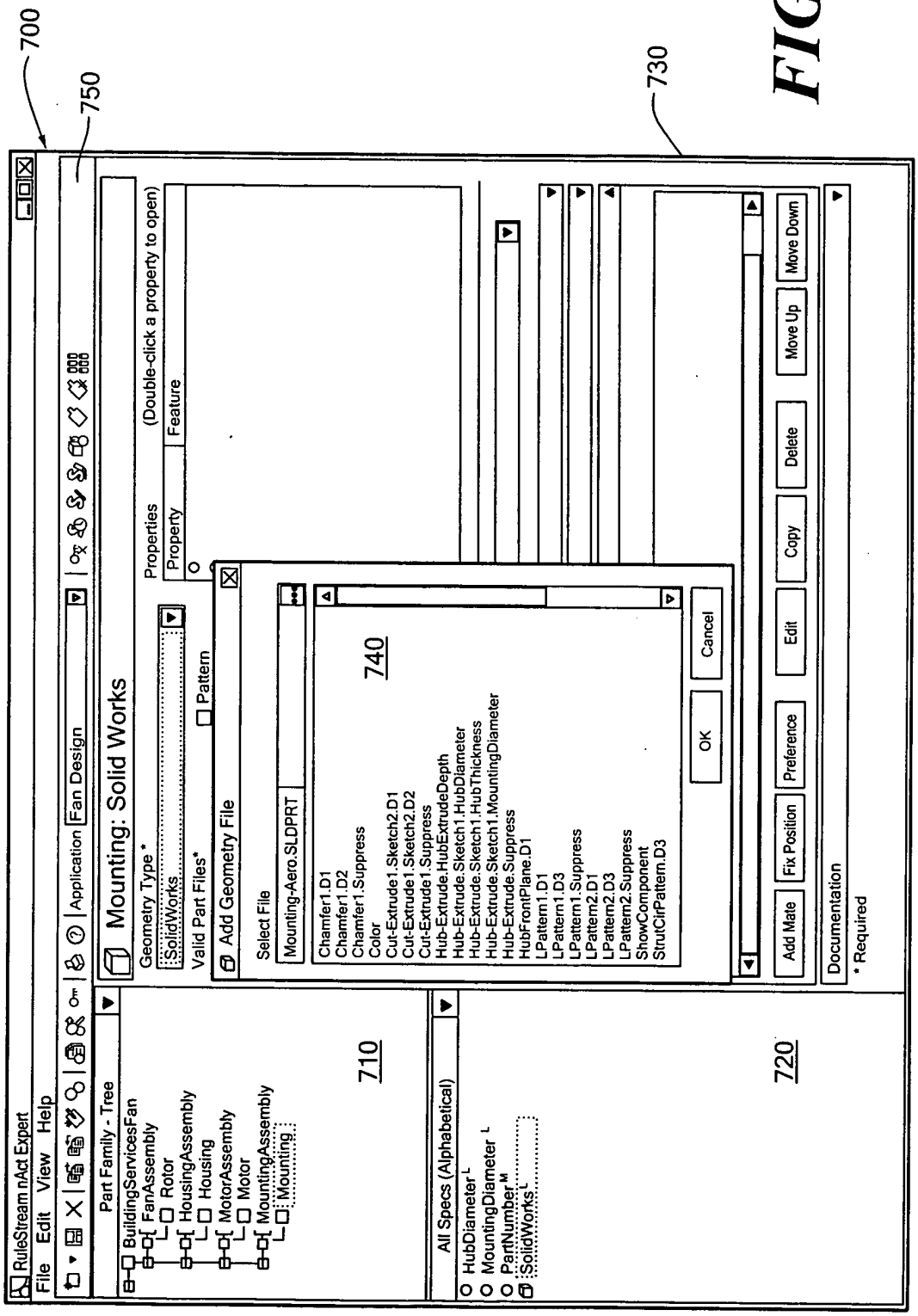

700
750
730
710
720
740
RuleStream nAct Expert
File Edit View Help
Application
Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
All Specs (Alphabetical)
HubDiameter L
MountingDiameter L
PartNumber M
SolidWorks L
Mounting: Solid Works
Geometry Type *
SolidWorks
Valid Part Files*
Pattern
Add Geometry File
Select File
Mounting-Aero.SLDPRT
Chamfer1.D1
Chamfer1.D2
Chamfer1.Suppress
Color
Cut-Extrude1.Sketch2.D1
Cut-Extrude1.Sketch2.D2
Cut-Extrude1.Suppress
Hub-Extrude.HubExtrudeDepth
Hub-Extrude.Sketch1.HubDiameter
Hub-Extrude.Sketch1.HubThickness
Hub-Extrude.Sketch1.MountingDiameter
Hub-Extrude.Suppress
HubFrontPlane.D1
LPattern1.D1
LPattern1.D3
LPattern1.Suppress
LPattern2.D1
LPattern2.D3
LPattern2.Suppress
ShowComponent
StrutCirPattern.D3
OK
Cancel
Properties
(Double-click a property to open)
Property
Feature
Add Mate
Fix Position
Preference
Edit
Copy
Delete
Move Up
Move Down
Documentation
* Required

FIG. 7

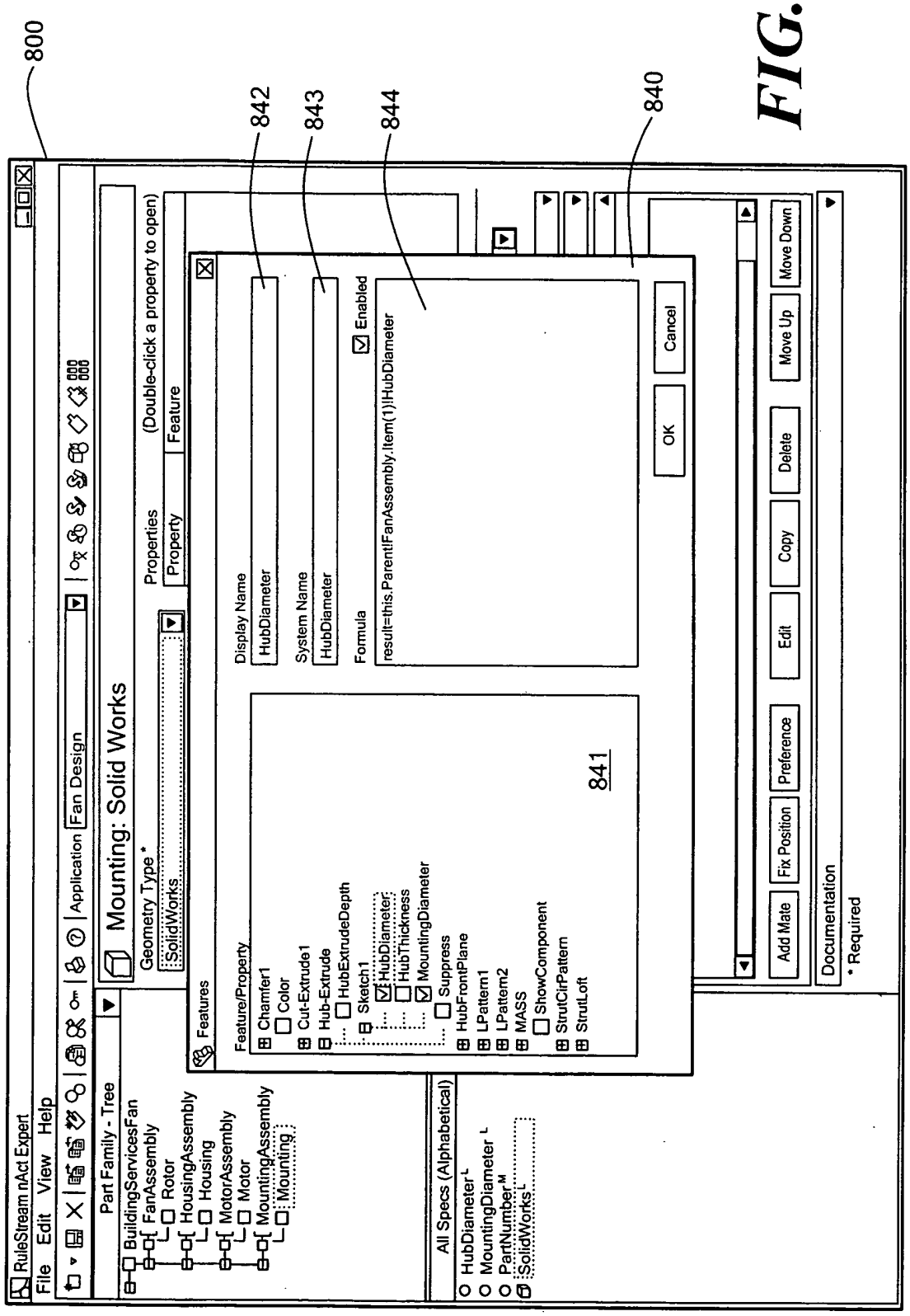

800
RuleStream nAct Expert
File Edit View Help
Application
Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
Mounting: Solid Works
Geometry Type *
SolidWorks
Properties
(Double-click a property to open)
Property
Feature
Features
Feature/Property
Chamfer1
Color
Cut-Extrude1
Hub-Extrude
HubExtrudeDepth
Sketch1
HubDiameter
HubThickness
MountingDiameter
Suppress
HubFrontPlane
LPattern1
LPattern2
MASS
ShowComponent
StrutCirPattern
StrutLoft
841
Display Name
HubDiameter
System Name
HubDiameter
Formula
Enabled
result=this.Parent!FanAssembly.Item(1)!HubDiameter
842
843
844
840
OK
Cancel
All Specs (Alphabetical)
HubDiameter L
MountingDiameter L
PartNumber M
SolidWorks L
Add Mate
Fix Position
Preference
Edit
Copy
Delete
Move Up
Move Down
Documentation
* Required

FIG. 8

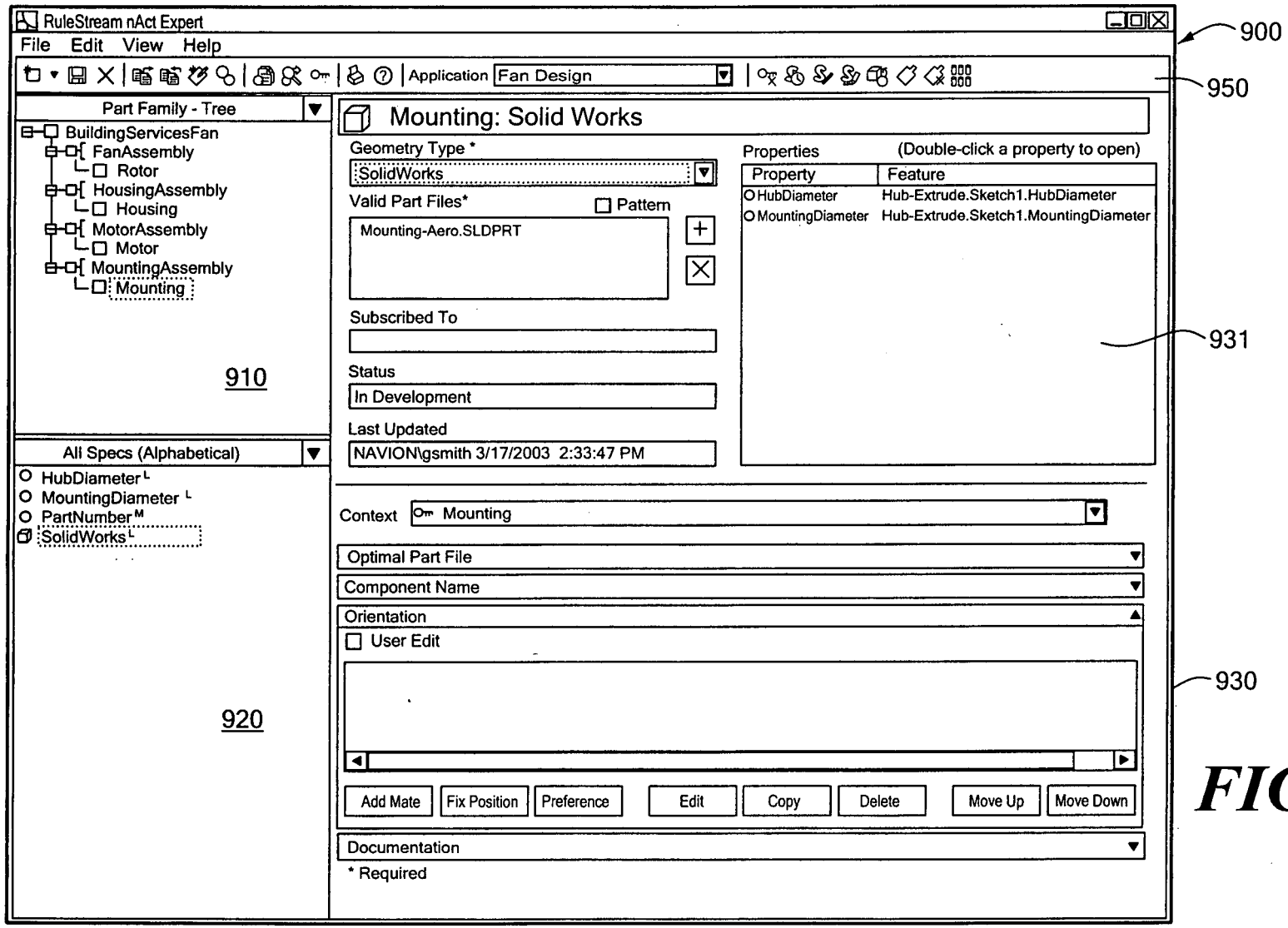


FIG. 9

Title: Knowledge Management System with Integrated Product Document Management for Computer-Aided Design Modeling
Inventor(s): Carek et al.
Application No.: 10/800,051
Docket No.: 2834/103
Page 7 of 38

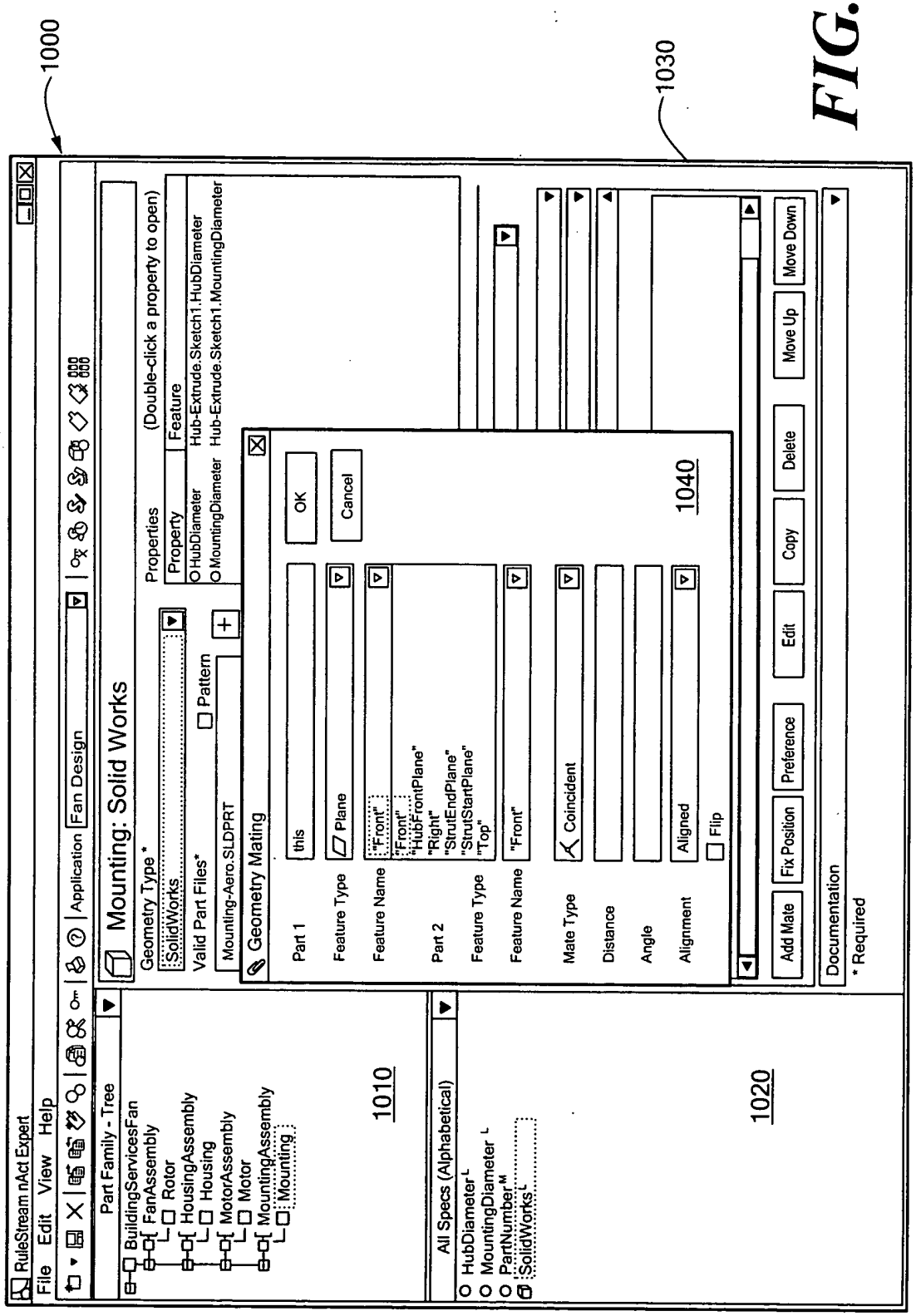

1000
1030
RuleStream nAct Expert
File Edit View Help
Application Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
1010
All Specs (Alphabetical)
HubDiameter L
MountingDiameter L
PartNumber M
SolidWorks L
1020
Mounting: Solid Works
Geometry Type *
SolidWorks
Valid Part Files*
Mounting-Aero.SLDPRT
Pattern
Properties (Double-click a property to open)
Property
Feature
HubDiameter
Hub-Extrude.Sketch1.HubDiameter
MountingDiameter
Hub-Extrude.Sketch1.MountingDiameter
Geometry Mating
Part 1
this
OK
Feature Type
Plane
Cancel
Feature Name
"Front"
"Front"
"HubFrontPlane"
"Right"
"StrutEndPlane"
"StrutStartPlane"
"Top"
Part 2
Feature Type
Feature Name
"Front"
Mate Type
Coincident
Distance
Angle
Alignment
Aligned
Flip
1040
Add Mate
Fix Position
Preference
Edit
Copy
Delete
Move Up
Move Down
Documentation
* Required

FIG. 10

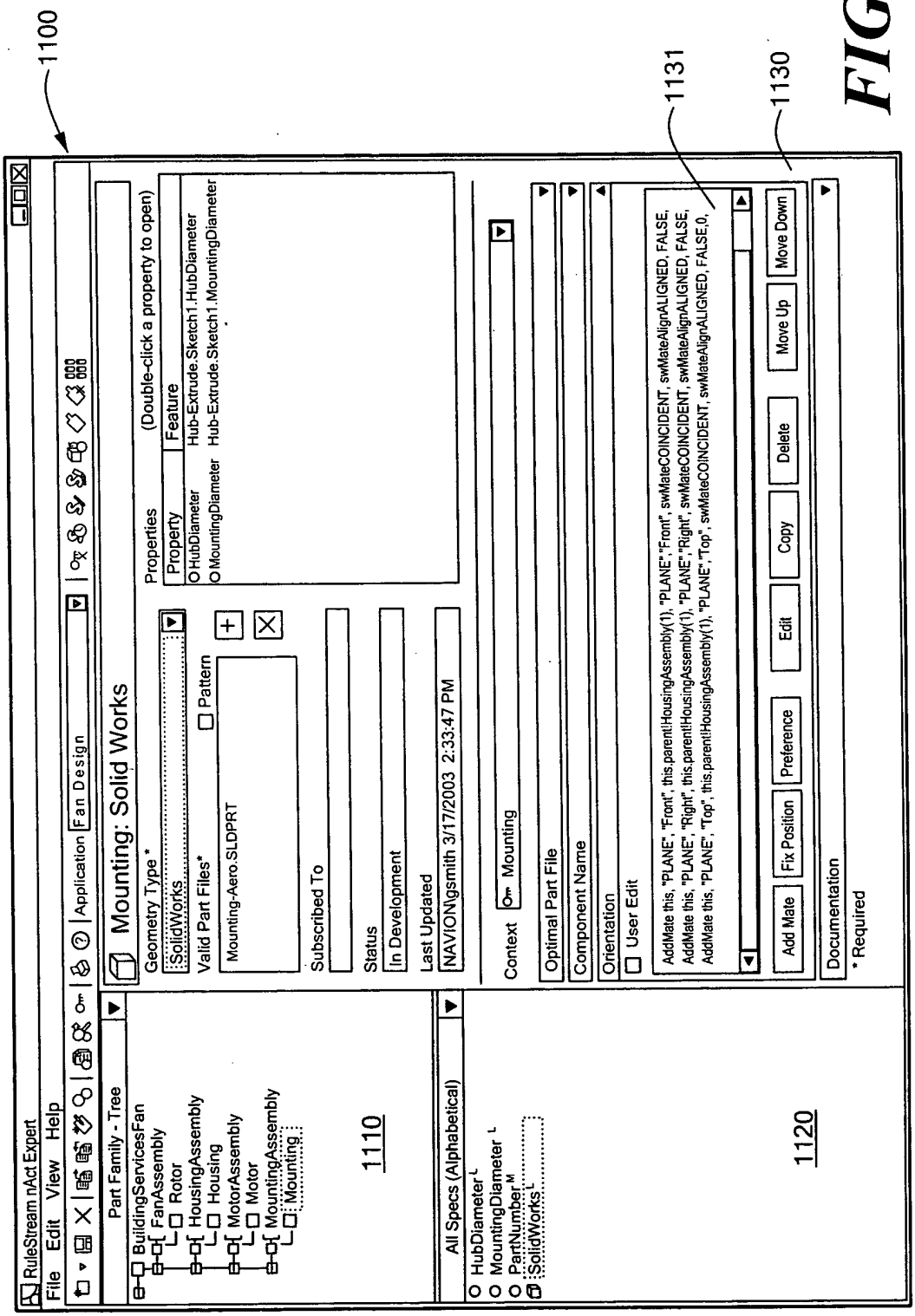

1100
RuleStream nAct Expert
File Edit View Help
Application
Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
1110
Mounting: Solid Works
Geometry Type *
SolidWorks
Valid Part Files*
Pattern
Mounting-Aero.SLDPRT
Subscribed To
Status
In Development
Last Updated
NAVIONgsmith 3/17/2003 2:33:47 PM
Properties
(Double-click a property to open)
Property
Feature
HubDiameter
Hub-Extrude.Sketch1.HubDiameter
MountingDiameter
Hub-Extrude.Sketch1.MountingDiameter
All Specs (Alphabetical)
HubDiameter L
MountingDiameter L
PartNumber M
SolidWorks L
1120
Context
Mounting
Optimal Part File
Component Name
Orientation
User Edit
AddMate this, "PLANE", "Front", this.parent!HousingAssembly(1), "PLANE","Front", swMateCOINCIDENT, swMateAlignALIGNED, FALSE,
AddMate this, "PLANE", "Right", this.parent!HousingAssembly(1), "PLANE","Right", swMateCOINCIDENT, swMateAlignALIGNED, FALSE,
AddMate this, "PLANE", "Top", this.parent!HousingAssembly(1), "PLANE","Top", swMateCOINCIDENT, swMateAlignALIGNED, FALSE,0,
1131
Add Mate
Fix Position
Preference
Edit
Copy
Delete
Move Up
Move Down
1130
Documentation
* Required

FIG. 11

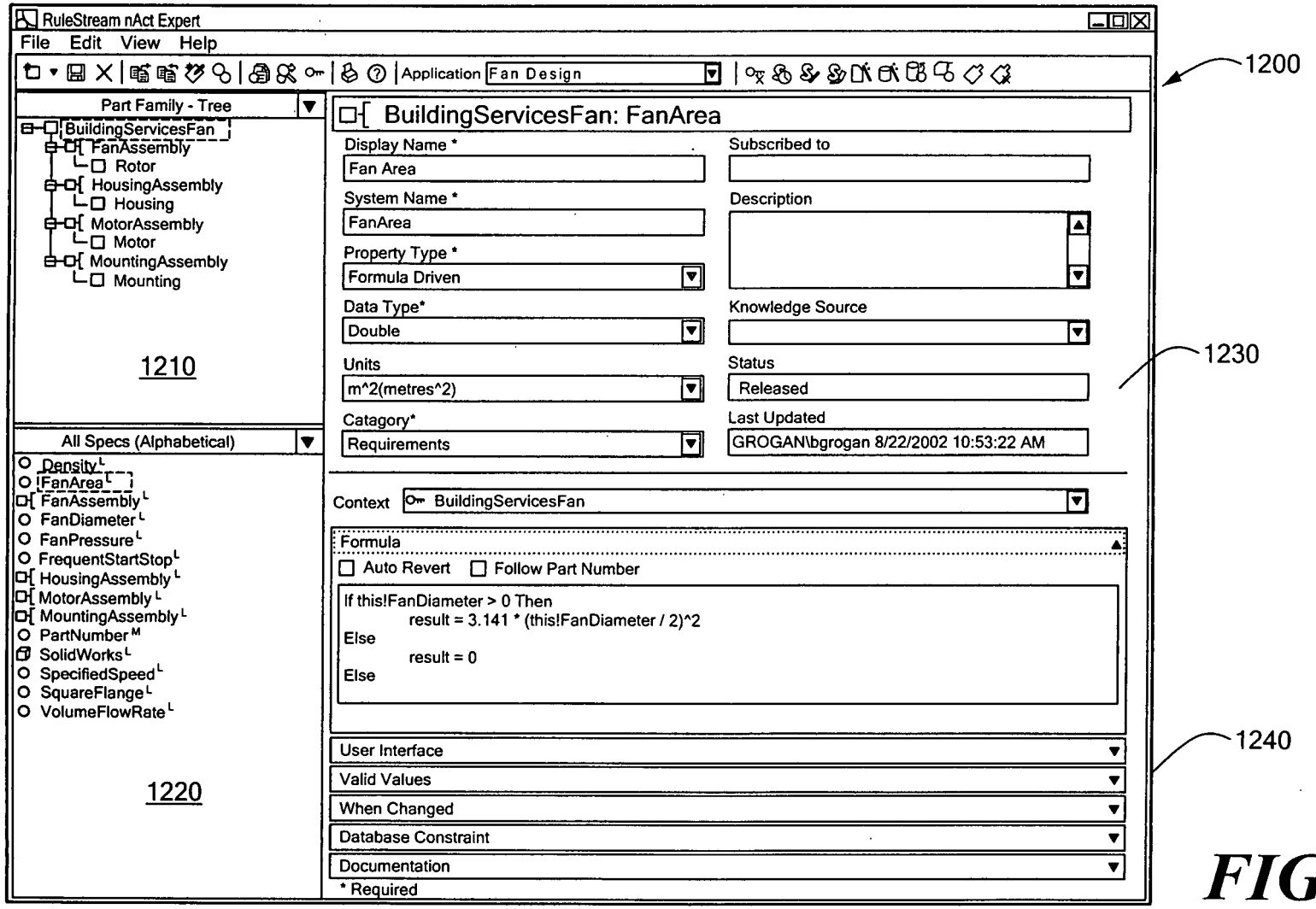


FIG. 12

Title: Knowledge Management System with Integrated Product Document Management for Computer-Aided Design Modeling
Inventor(s): Carek et al.
Application No.: 10/800,051
Docket No.: 2834/103
Page 10 of 38

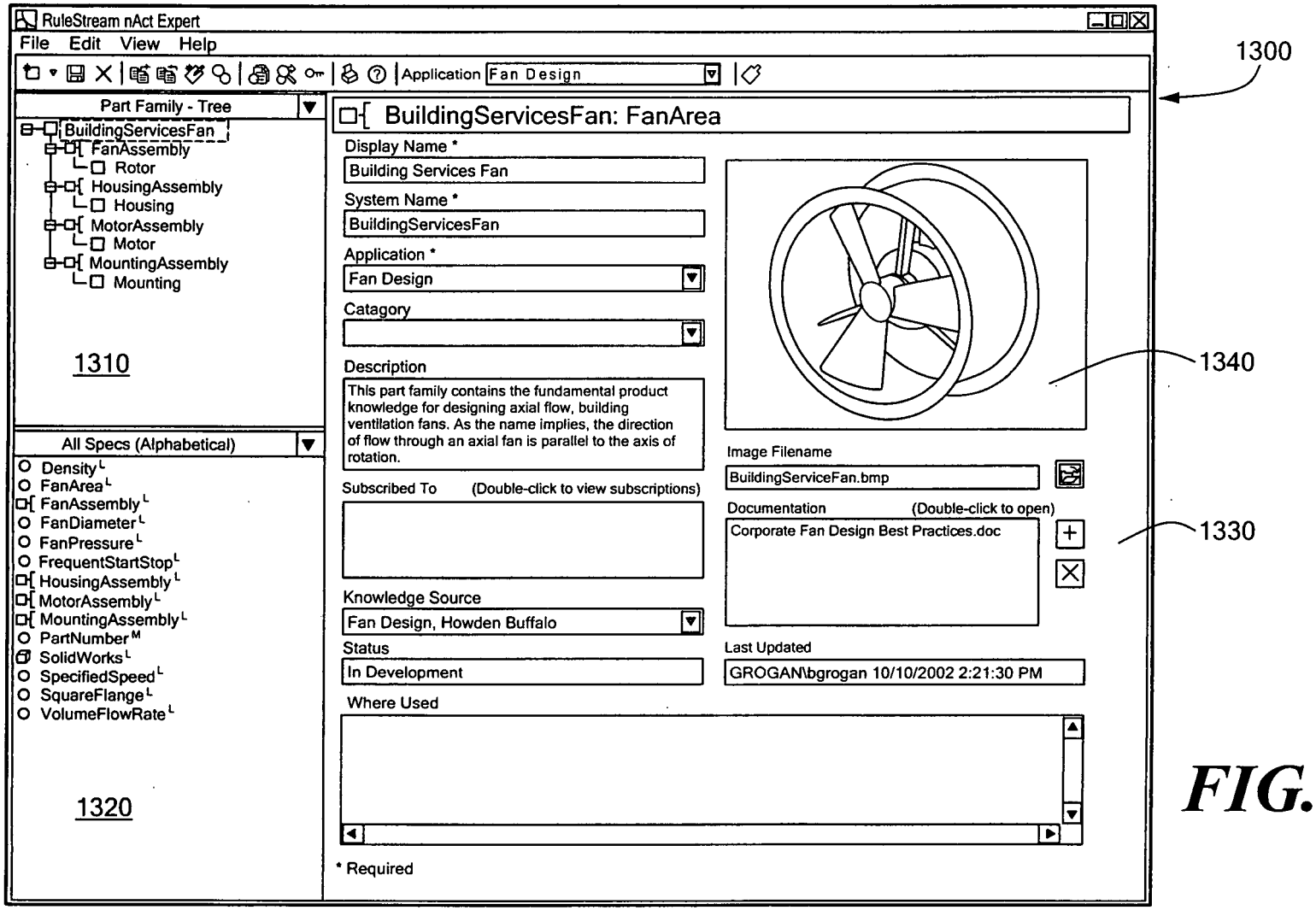

RuleStream nAct Expert
File Edit View Help
Application Fan Design
Part Family - Tree
BuildingServicesFan
FanAssembly
Rotor
HousingAssembly
Housing
MotorAssembly
Motor
MountingAssembly
Mounting
1310
All Specs (Alphabetical)
Density
FanArea
FanAssembly
FanDiameter
FanPressure
FrequentStartStop
HousingAssembly
MotorAssembly
MountingAssembly
PartNumber
SolidWorks
SpecifiedSpeed
SquareFlange
VolumeFlowRate
1320
BuildingServicesFan: FanArea
Display Name *
Building Services Fan
System Name *
BuildingServicesFan
Application *
Fan Design
Catagory
Description
This part family contains the fundamental product knowledge for designing axial flow, building ventilation fans. As the name implies, the direction of flow through an axial fan is parallel to the axis of rotation.
Subscribed To (Double-click to view subscriptions)
Knowledge Source
Fan Design, Howden Buffalo
Status
In Development
Where Used
* Required
1340
Image Filename
BuildingServiceFan.bmp
Documentation (Double-click to open)
Corporate Fan Design Best Practices.doc
1330
Last Updated
GROGAN\bgrogan 10/10/2002 2:21:30 PM
1300

FIG. 13

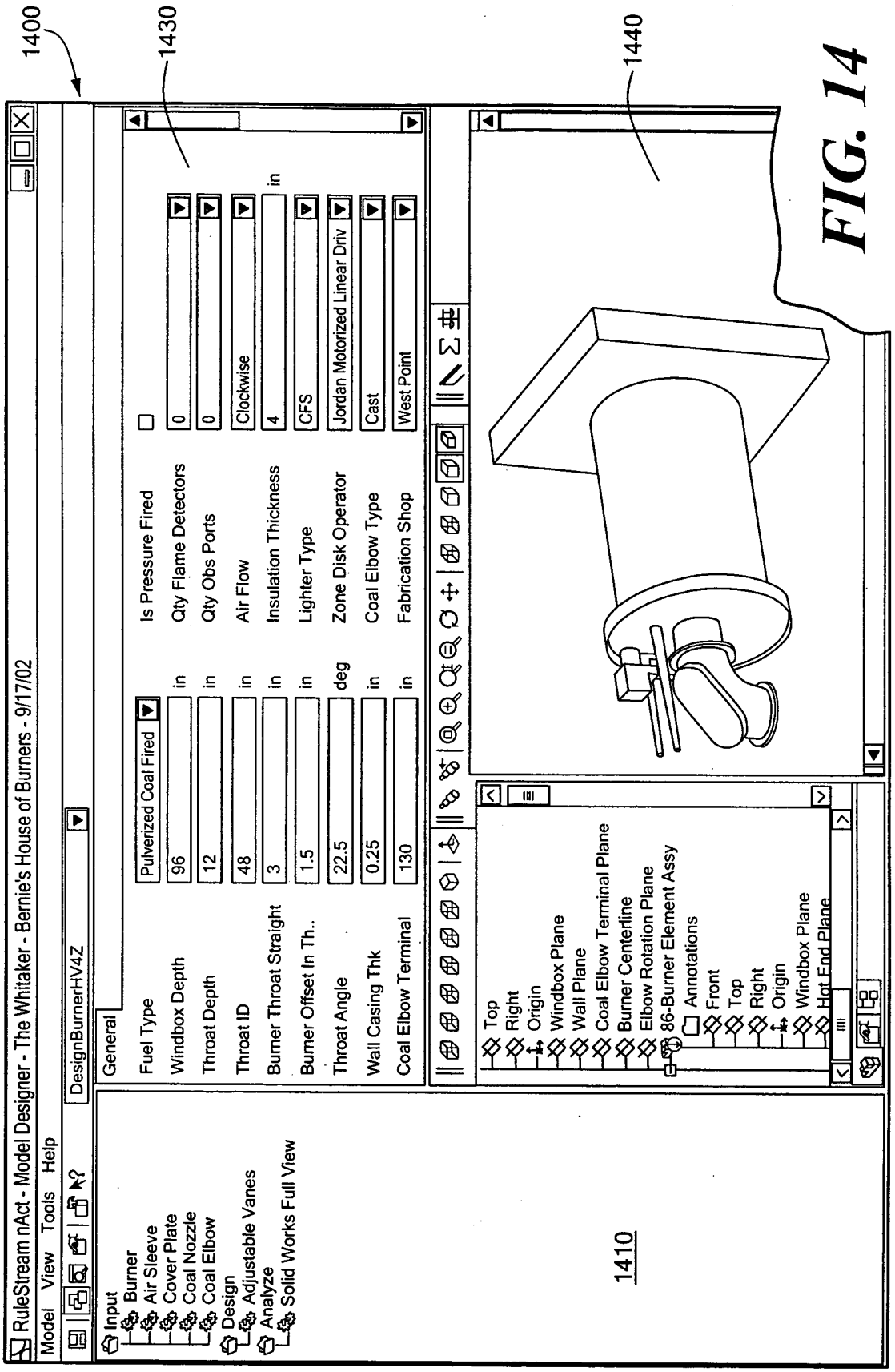

1400
1430
1440
1410
RuleStream nAct - Model Designer - The Whitaker - Bernie's House of Burners - 9/17/02
Model View Tools Help
DesignBurnerHV4Z
Input
Burner
Air Sleeve
Cover Plate
Coal Nozzle
Coal Elbow
Design
Adjustable Vanes
Analyze
Solid Works Full View
General
Fuel Type
Windbox Depth
Throat Depth
Throat ID
Burner Throat Straight
Burner Offset In Th..
Throat Angle
Wall Casing Thk
Coal Elbow Terminal
Pulverized Coal Fired
96
12
48
3
1.5
22.5
0.25
130
in
deg
Is Pressure Fired
Qty Flame Detectors
Qty Obs Ports
Air Flow
Insulation Thickness
Lighter Type
Zone Disk Operator
Coal Elbow Type
Fabrication Shop
0
0
Clockwise
4
CFS
Jordan Motorized Linear Driv
Cast
West Point
Top
Right
Origin
Windbox Plane
Wall Plane
Coal Elbow Terminal Plane
Burner Centerline
Elbow Rotation Plane
86-Burner Element Assy
Annotations
Front
Top
Right
Origin
Windbox Plane
Hot End Plane

FIG. 14

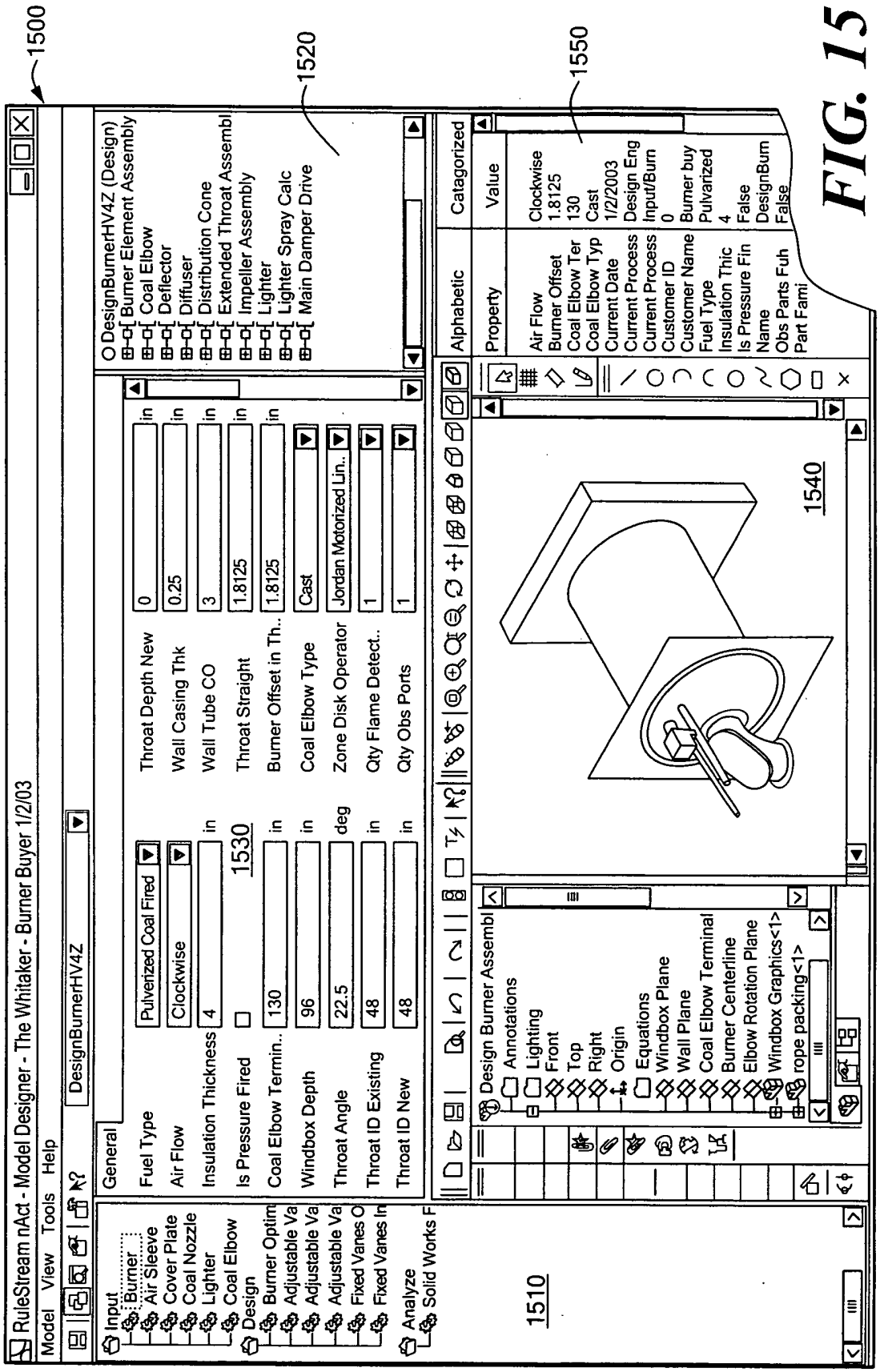

1500
RuleStream nAct - Model Designer - The Whitaker - Burner Buyer 1/2/03
Model View Tools Help
DesignBurnerHV4Z
Input
Burner
Air Sleeve
Cover Plate
Coal Nozzle
Lighter
Coal Elbow
Design
Burner Optim
Adjustable Va
Adjustable Va
Adjustable Va
Fixed Vanes O
Fixed Vanes In
Analyze
Solid Works F
General
Fuel Type
Air Flow
Insulation Thickness
Is Pressure Fired
Coal Elbow Termin..
Windbox Depth
Throat Angle
Throat ID Existing
Throat ID New
Pulverized Coal Fired
Clockwise
4
in
1530
130
96
22.5
deg
48
Throat Depth New
Wall Casing Thk
Wall Tube CO
Throat Straight
Burner Offset in Th..
Coal Elbow Type
Zone Disk Operator
Qty Flame Detect..
Qty Obs Ports
0
0.25
3
1.8125
Cast
Jordan Motorized Lin..
1
1520
DesignBurnerHV4Z (Design)
Burner Element Assembly
Coal Elbow
Deflector
Diffuser
Distribution Cone
Extended Throat Assembl
Impeller Assembly
Lighter
Lighter Spray Calc
Main Damper Drive
Alphabetic
Categorized
Property
Value
Air Flow
Burner Offset
Coal Elbow Ter
Coal Elbow Typ
Current Date
Current Process
Current Process
Customer ID
Customer Name
Fuel Type
Insulation Thic
Is Pressure Fin
Name
Obs Parts Fuh
Part Fami
Clockwise
1.8125
130
Cast
1/2/2003
Design Eng
Input/Burn
0
Burner buy
Pulvarized
4
False
DesignBurn
False
1550
1510
Design Burner Assembl
Annotations
Lighting
Front
Top
Right
Origin
Equations
Windbox Plane
Wall Plane
Coal Elbow Terminal
Burner Centerline
Elbow Rotation Plane
Windbox Graphics<1>
rope packing<1>
1540

FIG. 15

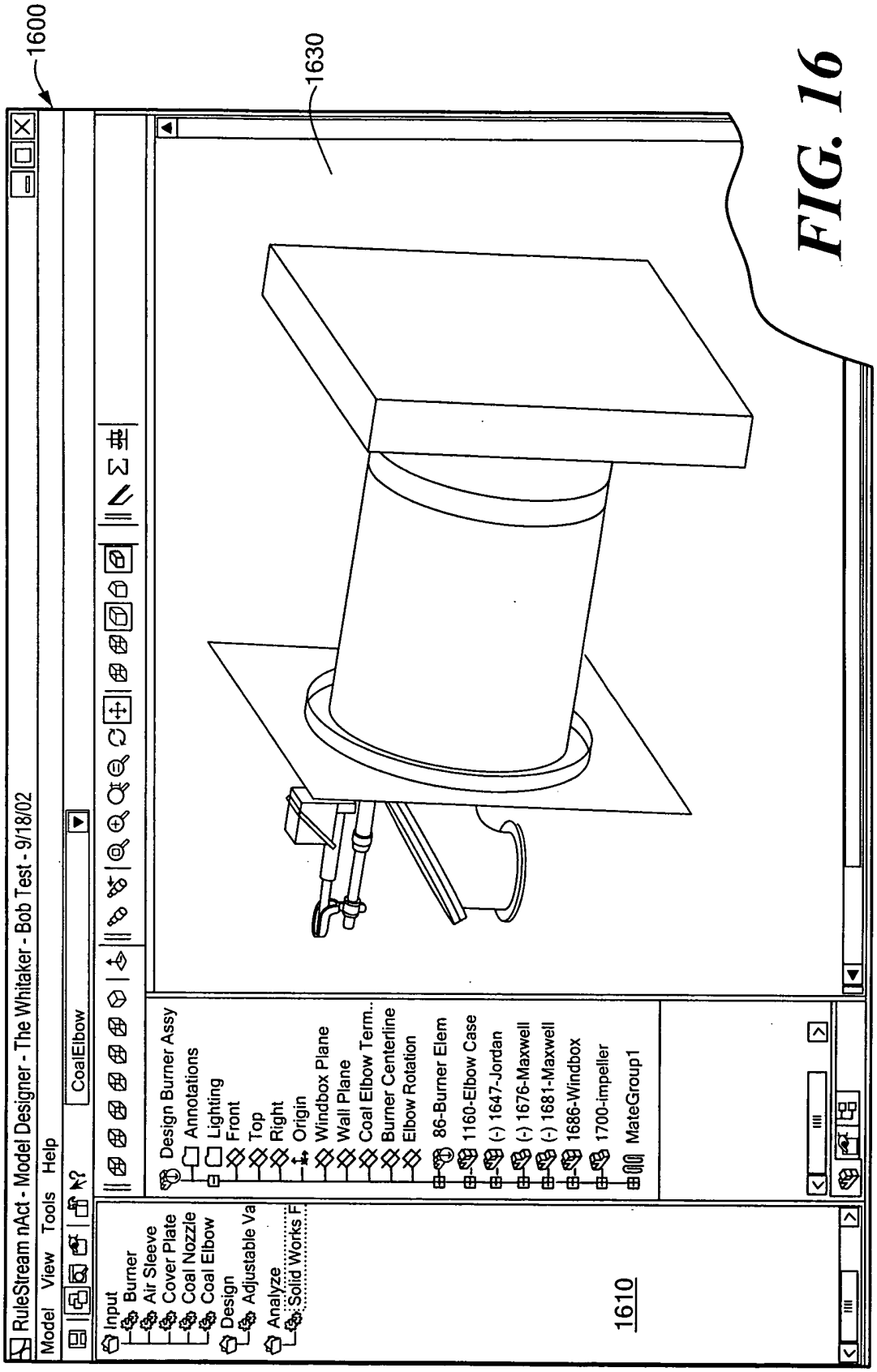

1600
1630
RuleStream nAct - Model Designer - The Whitaker - Bob Test - 9/18/02
Model View Tools Help
CoalElbow
Input
Burner
Air Sleeve
Cover Plate
Coal Nozzle
Coal Elbow
Design
Adjustable Va
Analyze
Solid Works F
Design Burner Assy
Annotations
Lighting
Front
Top
Right
Origin
Windbox Plane
Wall Plane
Coal Elbow Term...
Burner Centerline
Elbow Rotation
86-Burner Elem
1160-Elbow Case
(-) 1647-Jordan
(-) 1676-Maxwell
(-) 1681-Maxwell
1686-Windbox
1700-impeller
MateGroup1
1610

FIG. 16

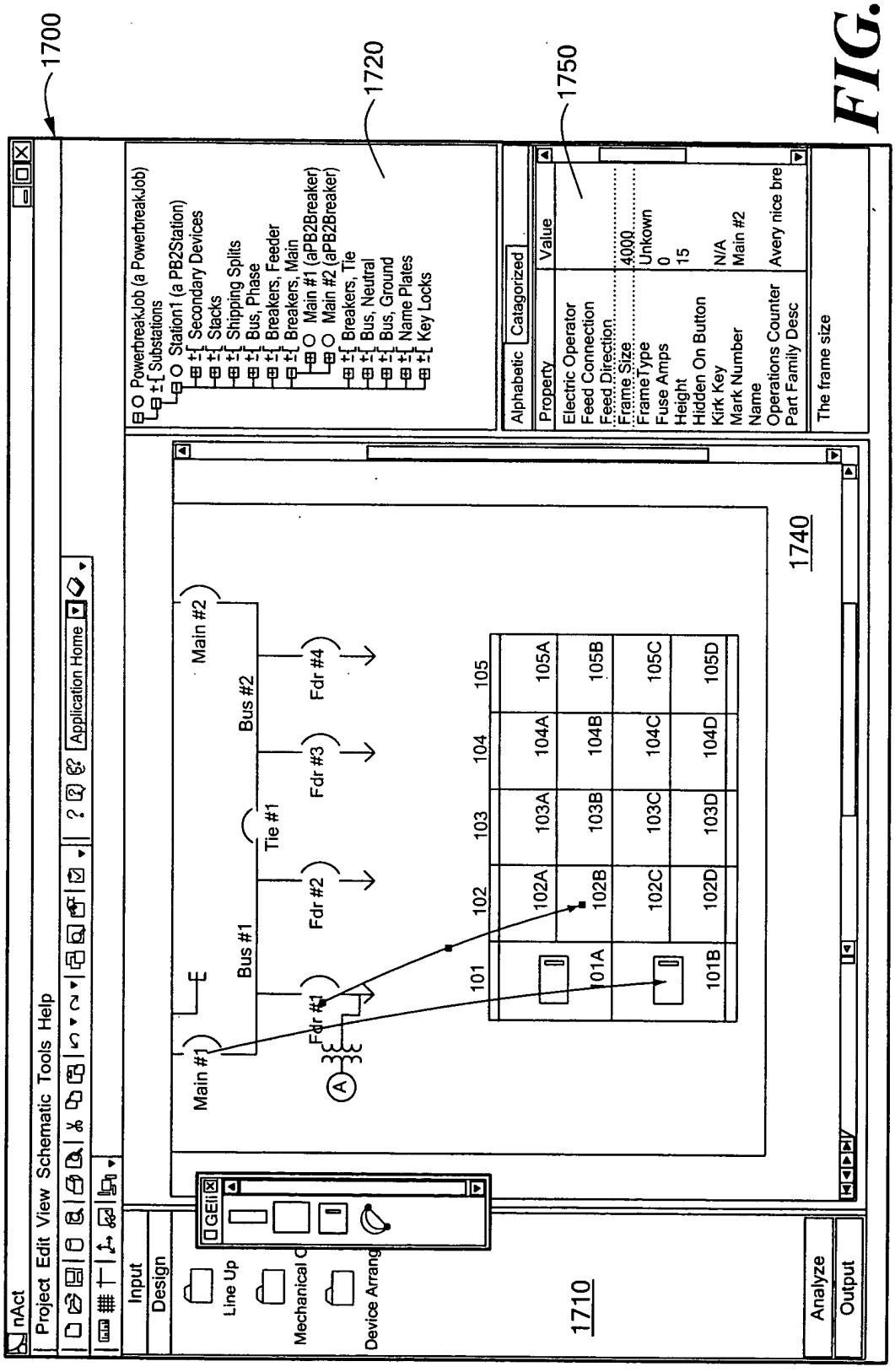

1700
1720
1750
1740
1710
nAct
Project Edit View Schematic Tools Help
Application Home
Input
Design
Analyze
Output
Line Up
Mechanical
Device Arrang
PowerbreakJob (a PowerbreakJob)
Substations
Station1 (a PB2Station)
Secondary Devices
Stacks
Shipping Splits
Bus, Phase
Breakers, Feeder
Breakers, Main
Main #1 (aPB2Breaker)
Main #2 (aPB2Breaker)
Breakers, Tie
Bus, Neutral
Bus, Ground
Name Plates
Key Locks
Alphabetic
Catagorized
Property
Value
Electric Operator
Feed Connection
Feed Direction
Frame Size
FrameType
Fuse Amps
Height
Hidden On Button
Kirk Key
Mark Number
Name
Operations Counter
Part Family Desc
4000
Unkown
0
15
N/A
Main #2
Avery nice bre
The frame size
Main #1
Bus #1
Bus #2
Tie #1
Fdr #1
Fdr #2
Fdr #3
Fdr #4
101
101A
101B
102
102A
102B
102C
102D
103
103A
103B
103C
103D
104
104A
104B
104C
104D
105
105A
105B
105C
105D

FIG. 17

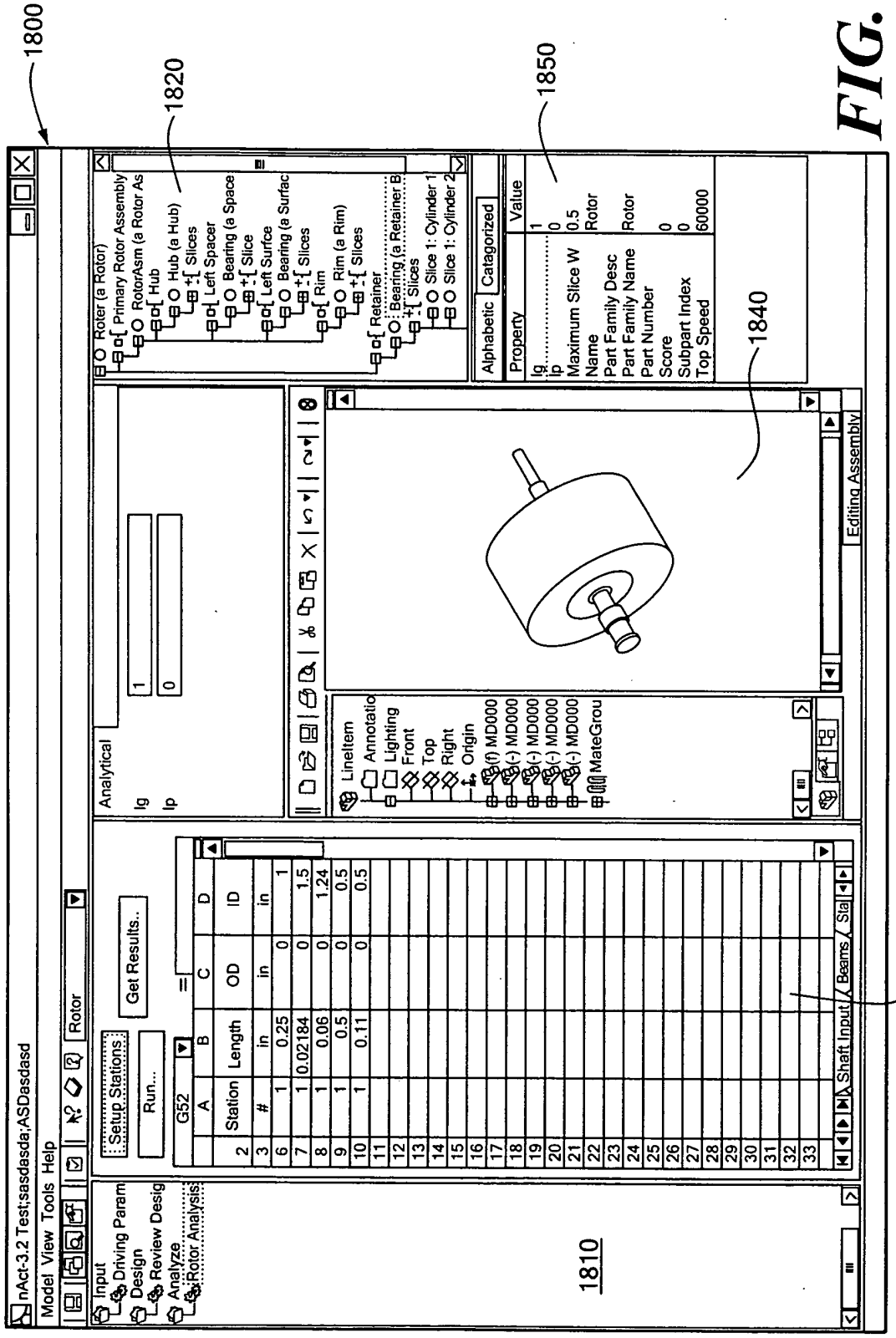

1800
1820
1850
1840
1860
1810
nAct-3.2 Test:sasdasda;ASDasdasd
Model View Tools Help
Rotor
Input
Driving Param
Design
Review Desig
Analyze
Rotor Analysis
Setup Stations
Run...
Get Results..
G52
Station
Length
OD
ID
Analytical
Roter (a Rotor)
Primary Rotor Assembly
RotorAsm (a Rotor As
Hub
Hub (a Hub)
Slices
Left Spacer
Bearing (a Space
Slice
Left Surfce
Bearing (a Surfac
Slices
Rim
Rim (a Rim)
Slices
Retainer
Bearing (a Retainer B
Slices
Slice 1: Cylinder 1
Slice 1: Cylinder 2
Alphabetic
Catagorized
Property
Value
Maximum Slice W
Name
Part Family Desc
Part Family Name
Part Number
Score
Subpart Index
Top Speed
Lineltem
Annotatio
Lighting
Front
Top
Right
Origin
MateGrou
Editing Assembly
Shaft Input
Beams

FIG. 18

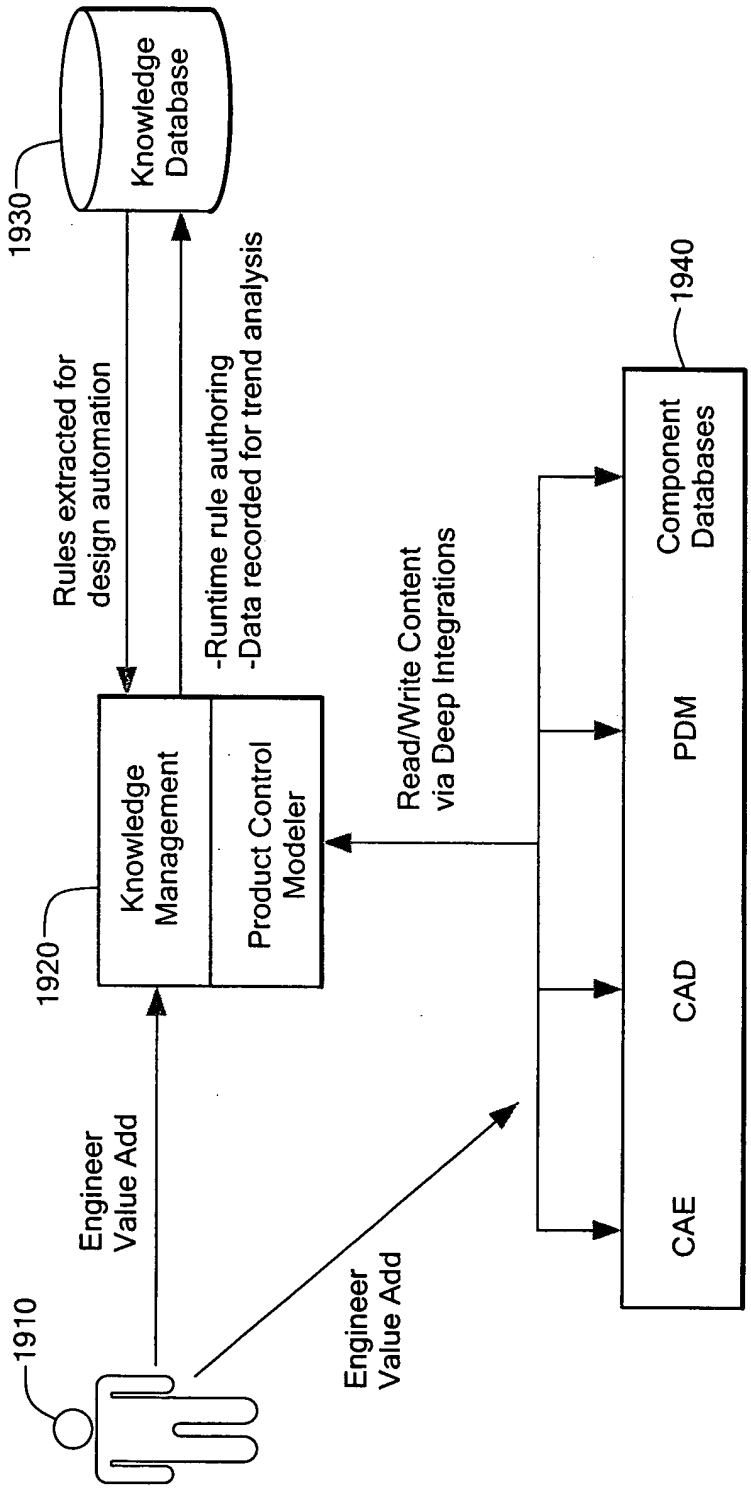

1930
Knowledge Database
Rules extracted for design automation
-Runtime rule authoring
-Data recorded for trend analysis
1920
Knowledge Management
Product Control Modeler
Read/Write Content via Deep Integrations
1940
Component Databases
PDM
CAD
CAE
1910
Engineer Value Add
Engineer Value Add

FIG. 19

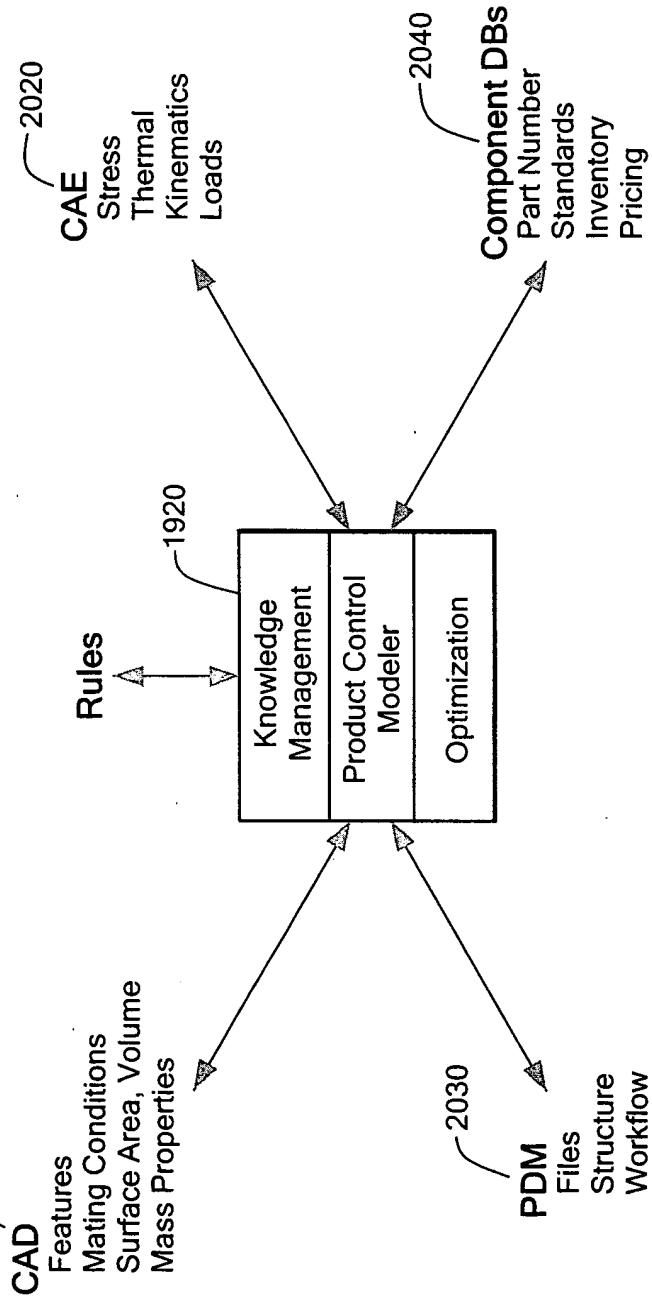
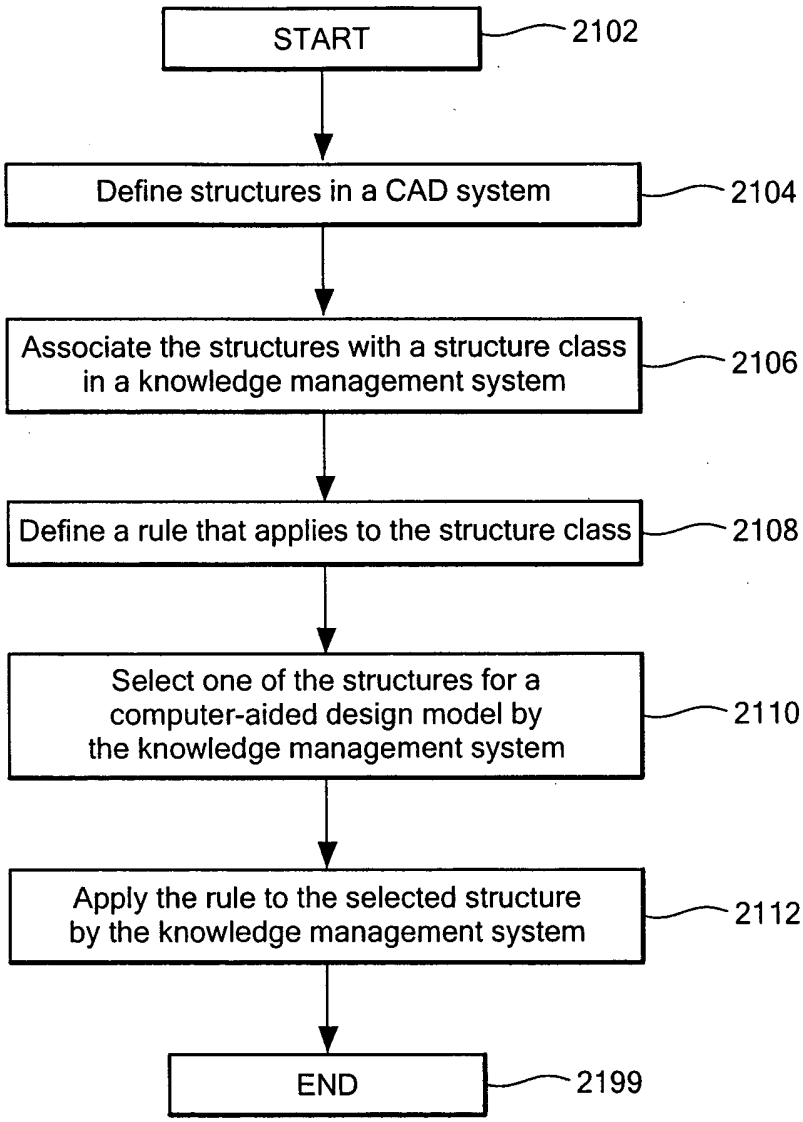

2020
CAE
Stress
Thermal
Kinematics
Loads
2040
Component DBs
Part Number
Standards
Inventory
Pricing
1920
Rules
Knowledge Management
Product Control Modeler
Optimization
2010
CAD
Features
Mating Conditions
Surface Area, Volume
Mass Properties
2030
PDM
Files
Structure
Workflow
BOM

FIG. 20


START
2102
Define structures in a CAD system
2104
Associate the structures with a structure class in a knowledge management system
2106
Define a rule that applies to the structure class
2108
Select one of the structures for a computer-aided design model by the knowledge management system
2110
Apply the rule to the selected structure by the knowledge management system
2112
END
2199

2100

FIG. 21

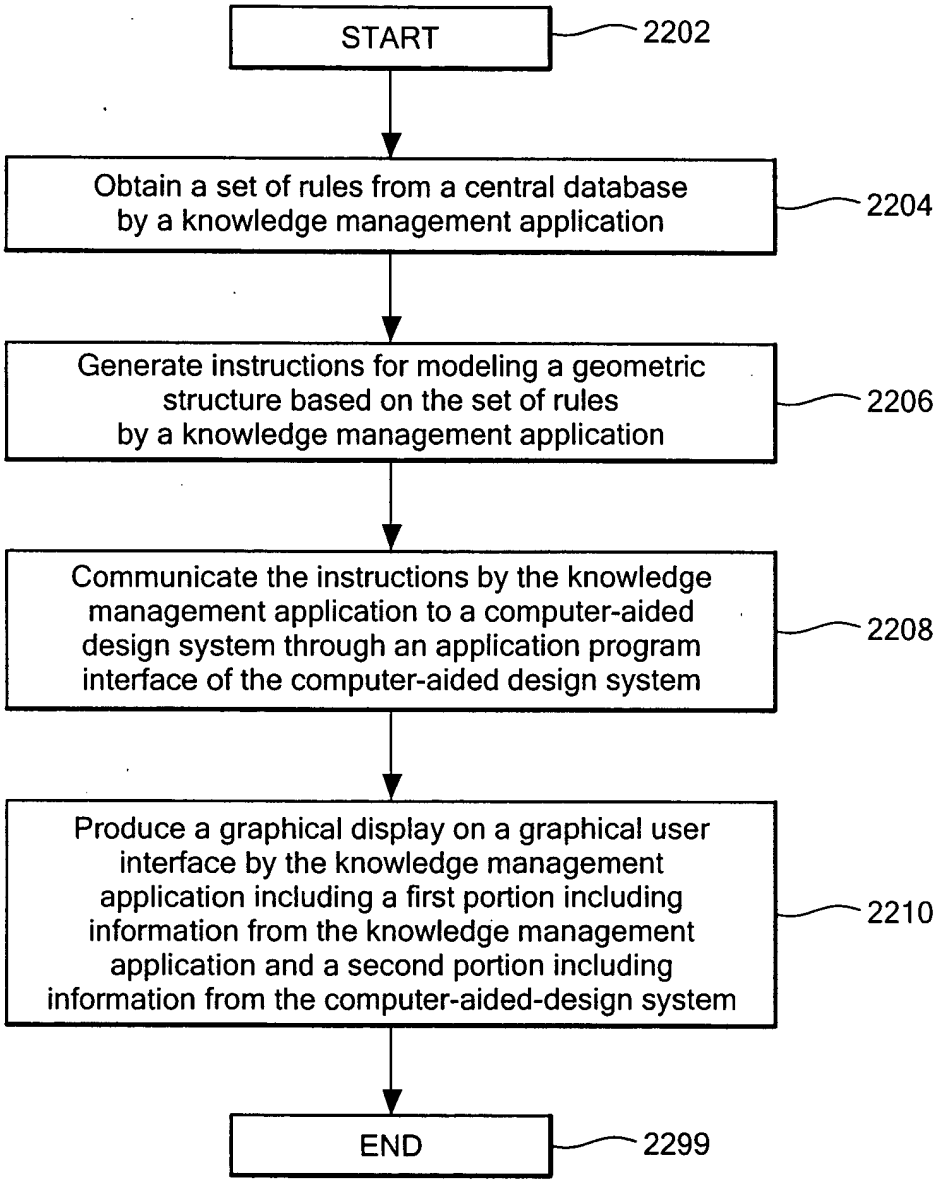

START
2202
Obtain a set of rules from a central database by a knowledge management application
2204
Generate instructions for modeling a geometric structure based on the set of rules by a knowledge management application
2206
Communicate the instructions by the knowledge management application to a computer-aided design system through an application program interface of the computer-aided design system
2208
Produce a graphical display on a graphical user interface by the knowledge management application including a first portion including information from the knowledge management application and a second portion including information from the computer-aided-design system
2210
END
2299
2200

FIG. 22

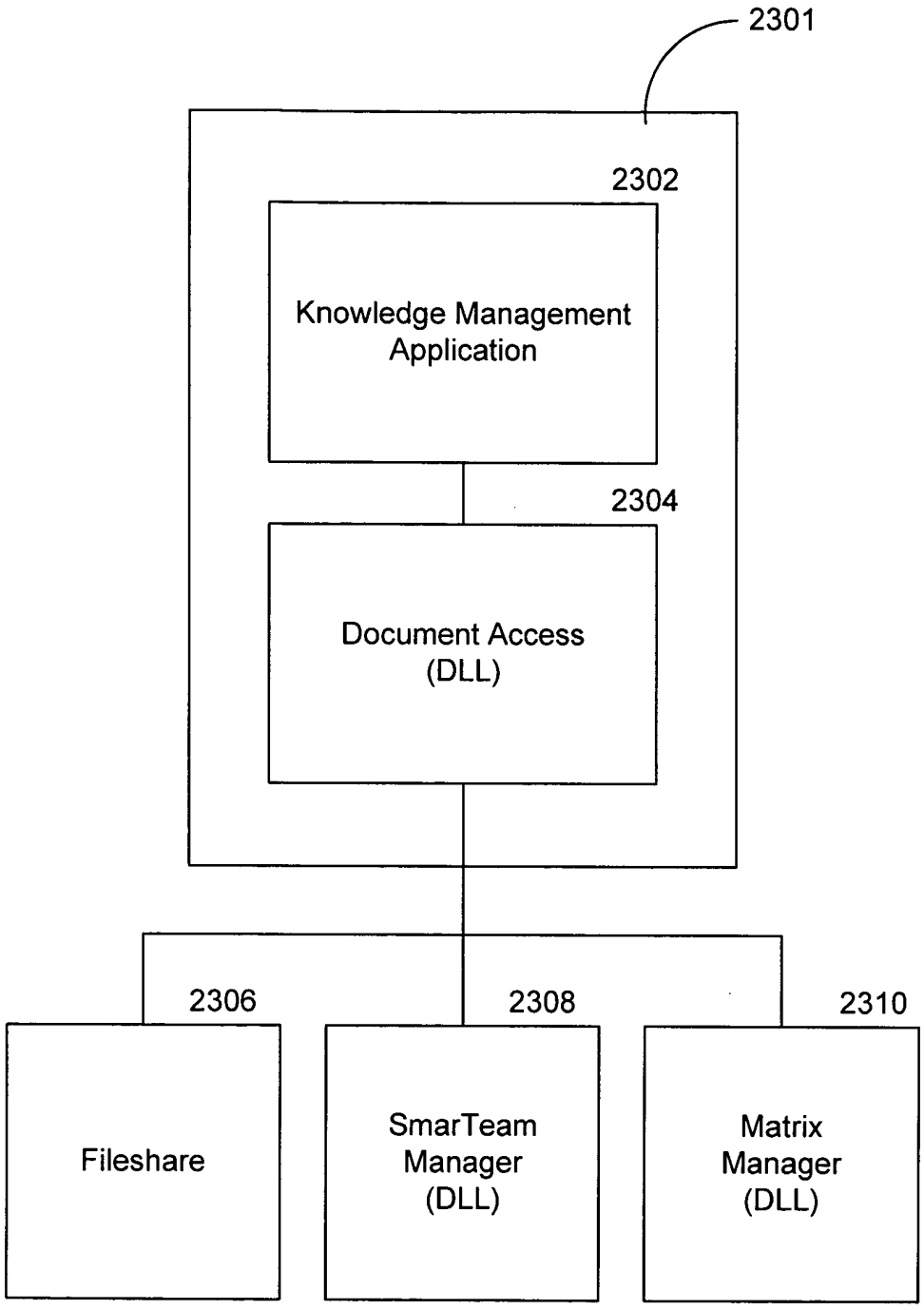

2301
2302
Knowledge Management Application
2304
Document Access (DLL)
2306
2308
2310
Fileshare
SmarTeam Manager (DLL)
Matrix Manager (DLL)

FIG. 23

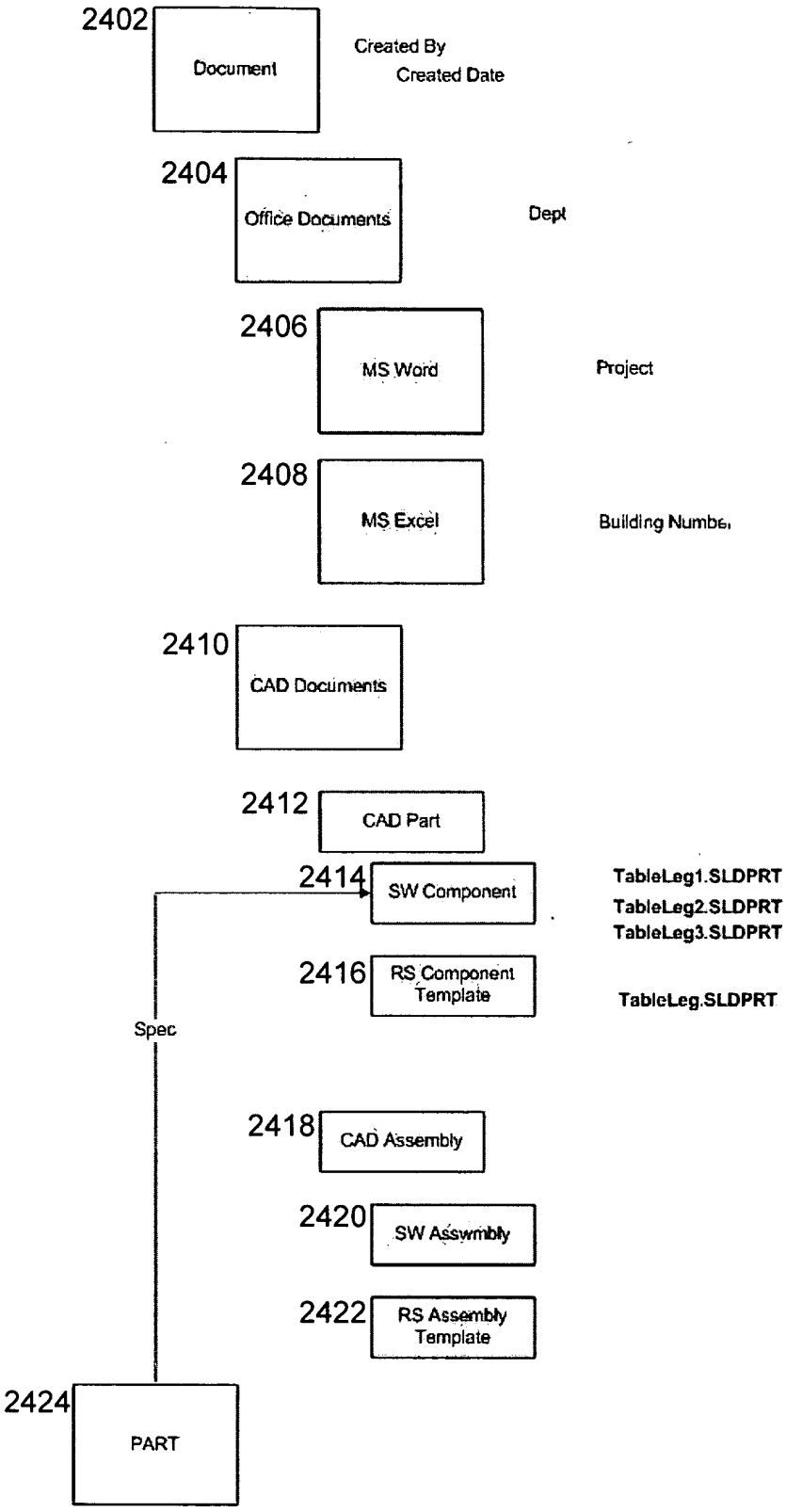

2402
Document
Created By
Created Date
2404
Office Documents
Dept
2406
MS Word
Project
2408
MS Excel
Building Numbe
2410
CAD Documents
2412
CAD Part
2414
SW Component
TableLeg1.SLDPRT
TableLeg2.SLDPRT
TableLeg3.SLDPRT
2416
RS Component Template
TableLeg.SLDPRT
Spec
2418
CAD Assembly
2420
SW Asswmbly
2422
RS Assembly Template
2424
PART

FIG. 24

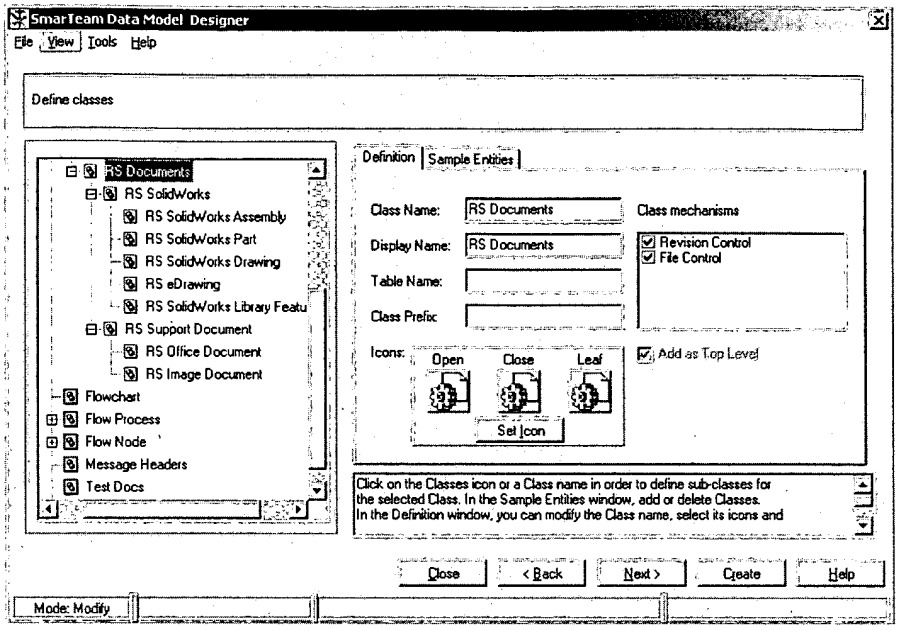

SmarTeam Data Model Designer
File View Tools Help
Define classes
RS Documents
RS SolidWorks
RS SolidWorks Assembly
RS SolidWorks Part
RS SolidWorks Drawing
RS eDrawing
RS SolidWorks Library Featu
RS Support Document
RS Office Document
RS Image Document
Flowchart
Flow Process
Flow Node
Message Headers
Test Docs
Definition
Sample Entities
Class Name:
RS Documents
Display Name:
RS Documents
Table Name:
Class Prefix:
Class mechanisms
Revision Control
File Control
Icons:
Open
Close
Leaf
Set Icon
Add as Top Level
Click on the Classes icon or a Class name in order to define sub-classes for the selected Class. In the Sample Entities window, add or delete Classes. In the Definition window, you can modify the Class name, select its icons and
Close
< Back
Next >
Create
Help
Mode: Modify

FIG. 25

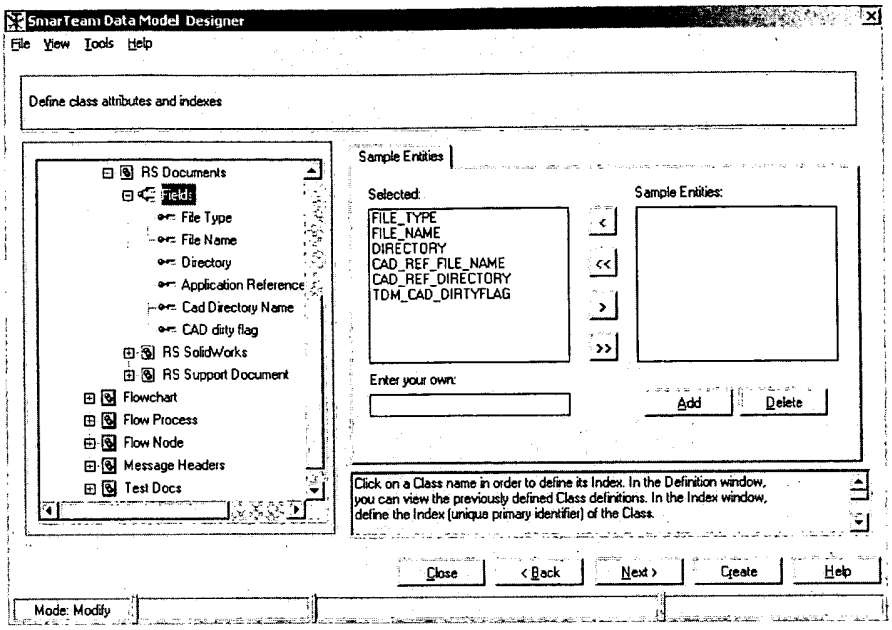

SmarTeam Data Model Designer
File View Tools Help
Define class attributes and indexes
RS Documents
Fields
File Type
File Name
Directory
Application Reference
Cad Directory Name
CAD dirty flag
RS SolidWorks
RS Support Document
Flowchart
Flow Process
Flow Node
Message Headers
Test Docs
Sample Entities
Selected:
FILE_TYPE
FILE_NAME
DIRECTORY
CAD_REF_FILE_NAME
CAD_REF_DIRECTORY
TDM_CAD_DIRTYFLAG
Sample Entities:
Enter your own:
Add
Delete
Click on a Class name in order to define its Index. In the Definition window, you can view the previously defined Class definitions. In the Index window, define the Index (unique primary identifier) of the Class.
Close
< Back
Next >
Create
Help
Mode: Modify

FIG. 26

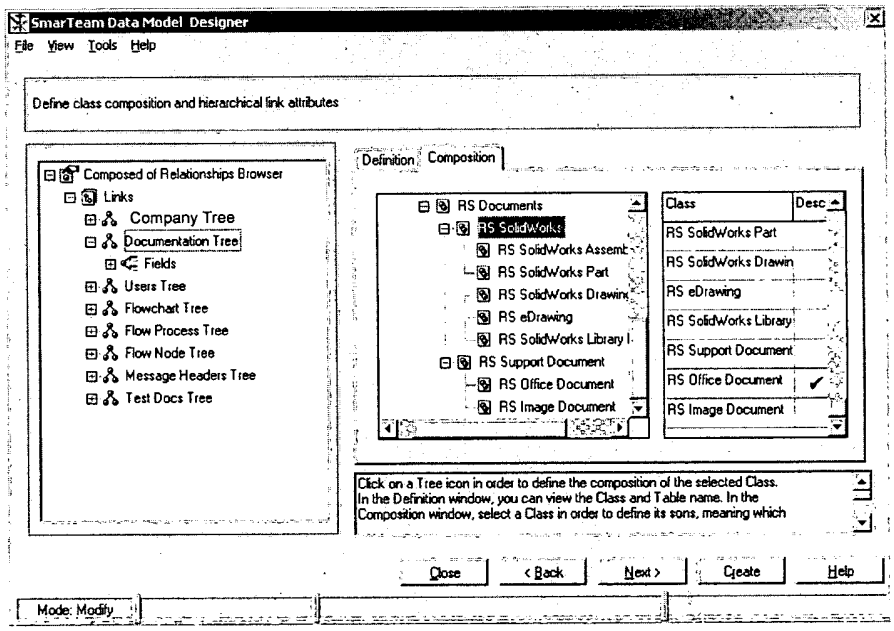

SmarTeam Data Model Designer
File View Tools Help
Define class composition and hierarchical link attributes
Composed of Relationships Browser
Links
Company Tree
Documentation Tree
Fields
Users Tree
Flowchart Tree
Flow Process Tree
Flow Node Tree
Message Headers Tree
Test Docs Tree
Definition
Composition
RS Documents
RS SolidWorks
RS SolidWorks Assemb
RS SolidWorks Part
RS SolidWorks Drawin
RS eDrawing
RS SolidWorks Library
RS Support Document
RS Office Document
RS Image Document
Class
Desc
RS SolidWorks Part
RS SolidWorks Drawin
RS eDrawing
RS SolidWorks Library
RS Support Document
RS Office Document
RS Image Document
Click on a Tree icon in order to define the composition of the selected Class. In the Definition window, you can view the Class and Table name. In the Composition window, select a Class in order to define its sons, meaning which
Close
< Back
Next >
Create
Help
Mode: Modify

FIG. 27

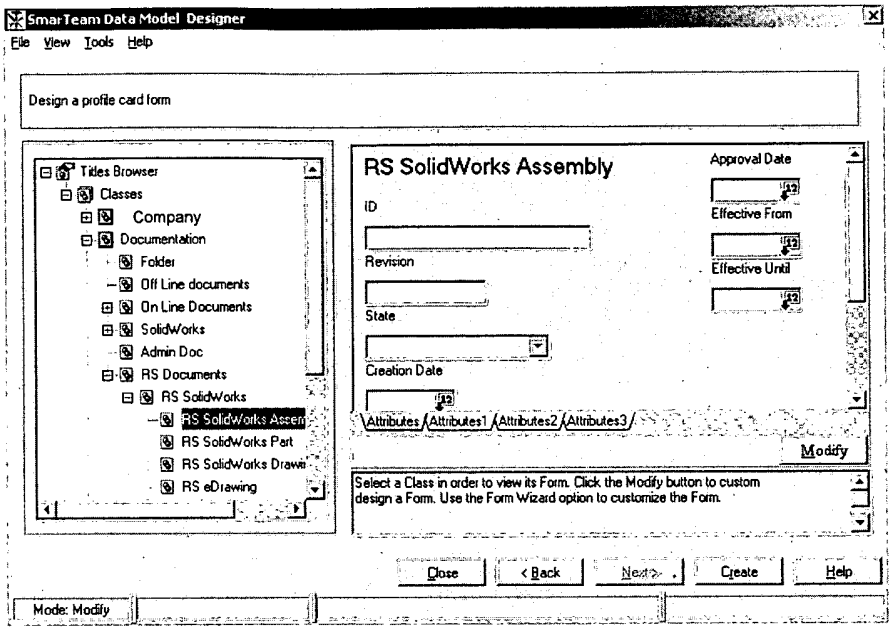

SmarTeam Data Model Designer
File View Tools Help
Design a profile card form
Titles Browser
Classes
Company
Documentation
Folder
Off Line documents
On Line Documents
SolidWorks
Admin Doc
RS Documents
RS SolidWorks
RS SolidWorks Assem
RS SolidWorks Part
RS SolidWorks Drawi
RS eDrawing
RS SolidWorks Assembly
ID
Revision
State
Creation Date
Approval Date
Effective From
Effective Until
Attributes Attributes1 Attributes2 Attributes3
Modify
Select a Class in order to view its Form. Click the Modify button to custom design a Form. Use the Form Wizard option to customize the Form.
Close
< Back
Next >
Create
Help
Mode: Modify

FIG. 28

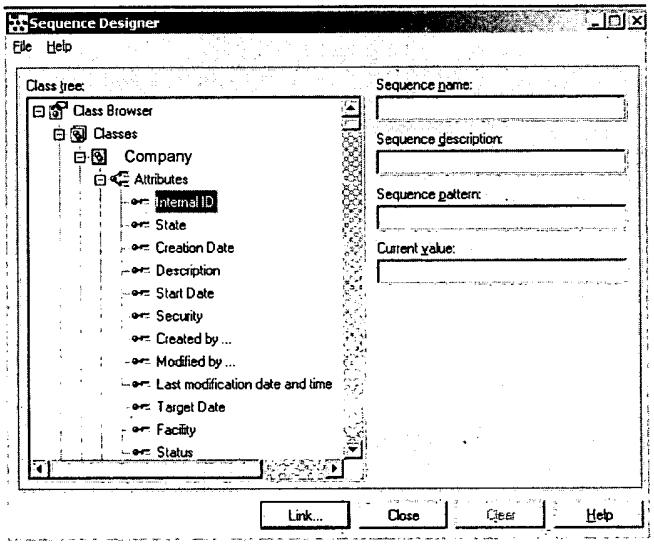

Sequence Designer
File Help
Class tree:
Class Browser
Classes
Company
Attributes
Internal ID
State
Creation Date
Description
Start Date
Security
Created by ...
Modified by ...
Last modification date and time
Target Date
Facility
Status
Sequence name:
Sequence description:
Sequence pattern:
Current value:
Link...
Close
Clear
Help

FIG. 29

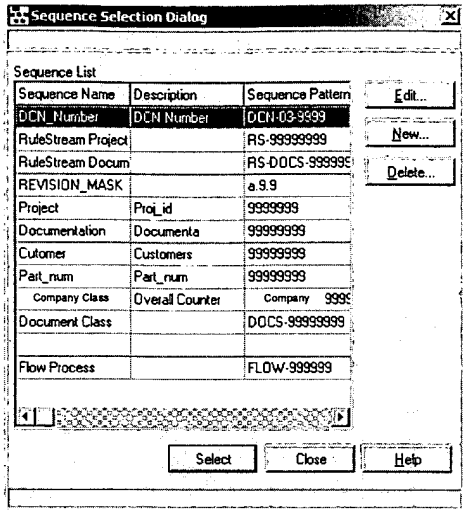

Sequence Selection Dialog
Sequence List
Sequence Name
Description
Sequence Pattern
DCN_Number
DCN Number
DCN-03-9999
RuleStream Project
RS-99999999
RuleStream Docum
RS-DOCS-999999
REVISION_MASK
a.9.9
Project
Proj_id
9999999
Documentation
Documenta
99999999
Cutomer
Customers
99999999
Part_num
Part_num
99999999
Company Class
Overall Counter
Company 999
Document Class
DOCS-99999999
Flow Process
FLOW-999999
Edit...
New...
Delete...
Select
Close
Help

FIG. 30

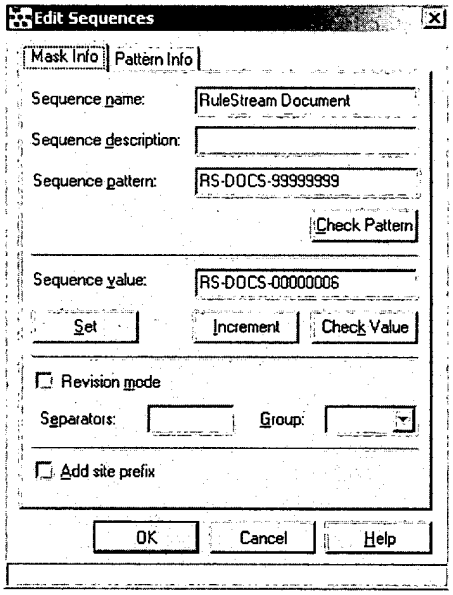

Edit Sequences
Mask Info
Pattern Info
Sequence name:
RuleStream Document
Sequence description:
Sequence pattern:
RS-DOCS-99999999
Check Pattern
Sequence value:
RS-DOCS-00000006
Set
Increment
Check Value
Revision mode
Separators:
Group:
Add site prefix
OK
Cancel
Help

FIG. 31

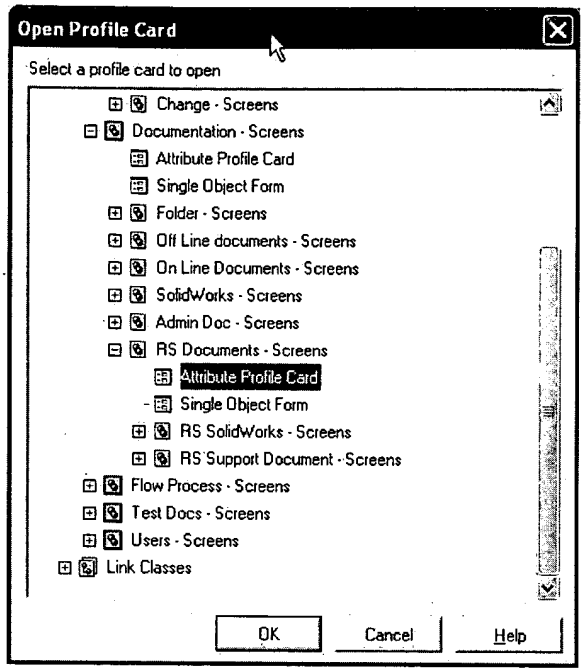

Open Profile Card
Select a profile card to open
Change - Screens
Documentation - Screens
Attribute Profile Card
Single Object Form
Folder - Screens
Off Line documents - Screens
On Line Documents - Screens
SolidWorks - Screens
Admin Doc - Screens
RS Documents - Screens
Attribute Profile Card
Single Object Form
RS SolidWorks - Screens
RS Support Document - Screens
Flow Process - Screens
Test Docs - Screens
Users - Screens
Link Classes
OK
Cancel
Help

FIG. 32

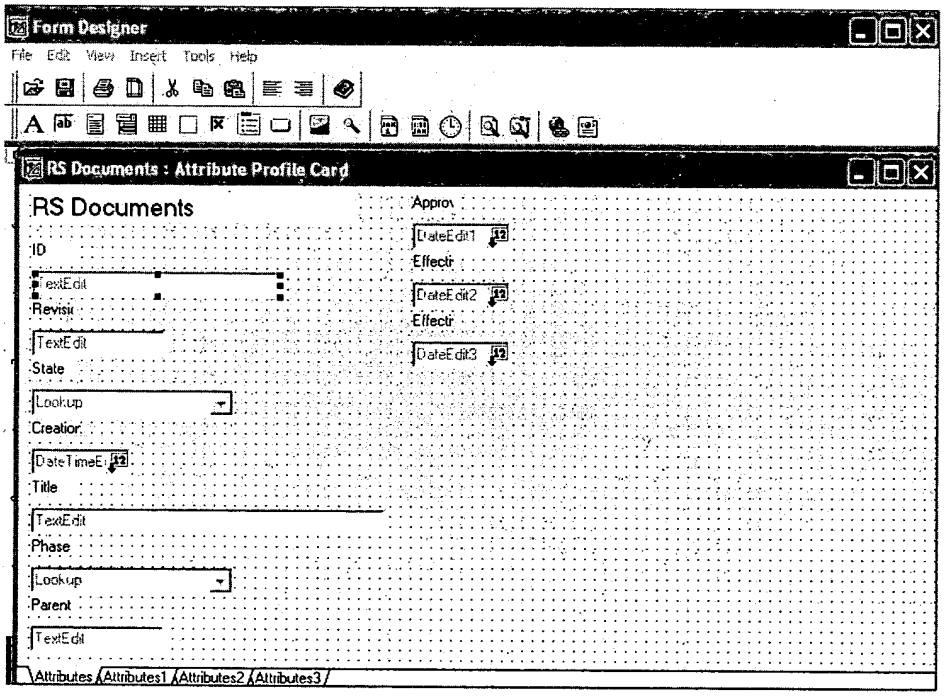

Form Designer
File Edit View Insert Tools Help
RS Documents : Attribute Profile Card
RS Documents
ID
TextEdit
Revisi
TextEdit
State
Lookup
Creation
DateTimeE
Title
TextEdit
Phase
Lookup
Parent
TextEdit
Appro
DateEdit1
Effecti
DateEdit2
Effecti
DateEdit3
Attributes Attributes1 Attributes2 Attributes3

FIG. 33

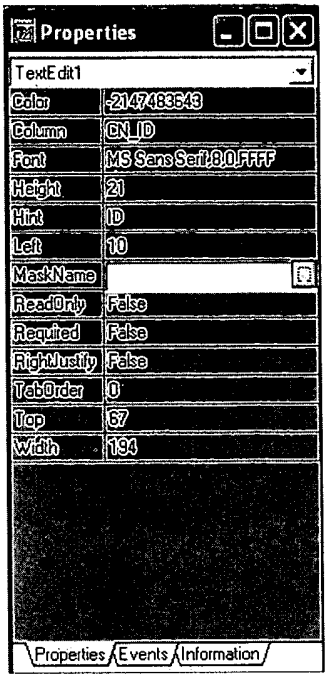

Properties
TextEdit1
Color
-2147483643
Column
CN_ID
Font
MS Sans Serif,8,0,FFFF
Height
21
Hint
ID
Left
10
MaskName
ReadOnly
False
Required
False
RightJustify
False
TabOrder
0
Top
67
Width
194
Properties
Events
Information

FIG. 34

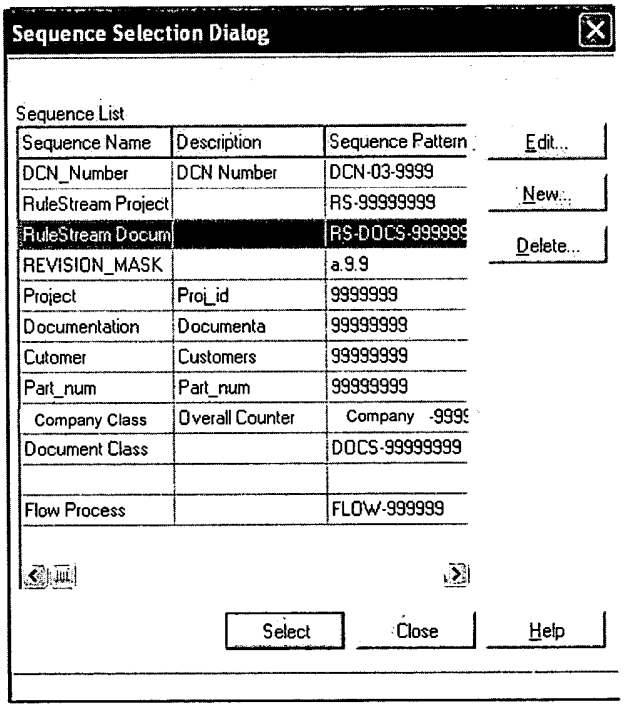

Sequence Selection Dialog
Sequence List
Sequence Name
Description
Sequence Pattern
DCN_Number
DCN Number
DCN-03-9999
RuleStream Project
RS-99999999
RuleStream Docum
RS-DOCS-999999
REVISION_MASK
a.9.9
Project
Proj_id
9999999
Documentation
Documenta
99999999
Cutomer
Customers
99999999
Part_num
Part_num
99999999
Company Class
Overall Counter
Company -999
Document Class
DOCS-99999999
Flow Process
FLOW-999999
Edit...
New...
Delete...
Select
Close
Help

FIG. 35

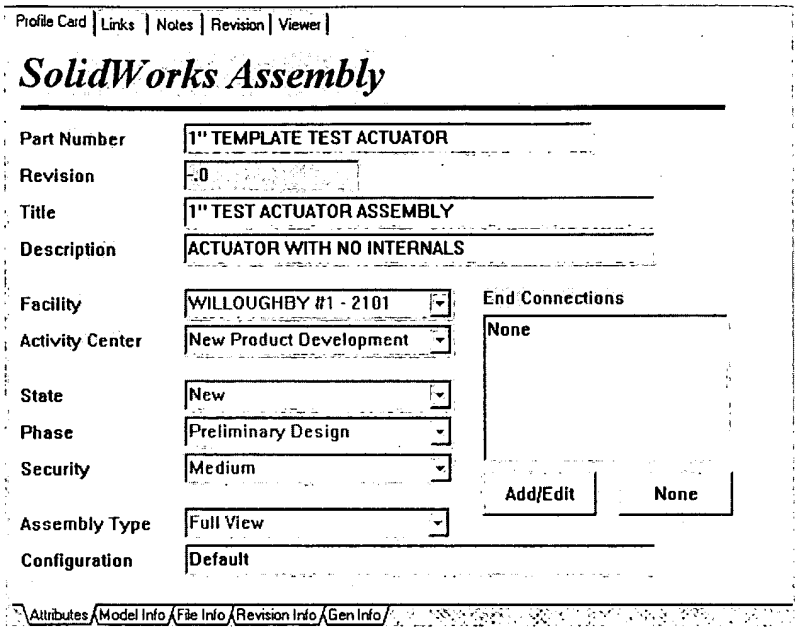

Profile Card
Links
Notes
Revision
Viewer
SolidWorks Assembly
Part Number
1" TEMPLATE TEST ACTUATOR
Revision
-.0
Title
1" TEST ACTUATOR ASSEMBLY
Description
ACTUATOR WITH NO INTERNALS
Facility
WILLOUGHBY #1 - 2101
Activity Center
New Product Development
State
New
Phase
Preliminary Design
Security
Medium
Assembly Type
Full View
Configuration
Default
End Connections
None
Add/Edit
None
Attributes
Model Info
File Info
Revision Info
Gen Info

FIG. 36

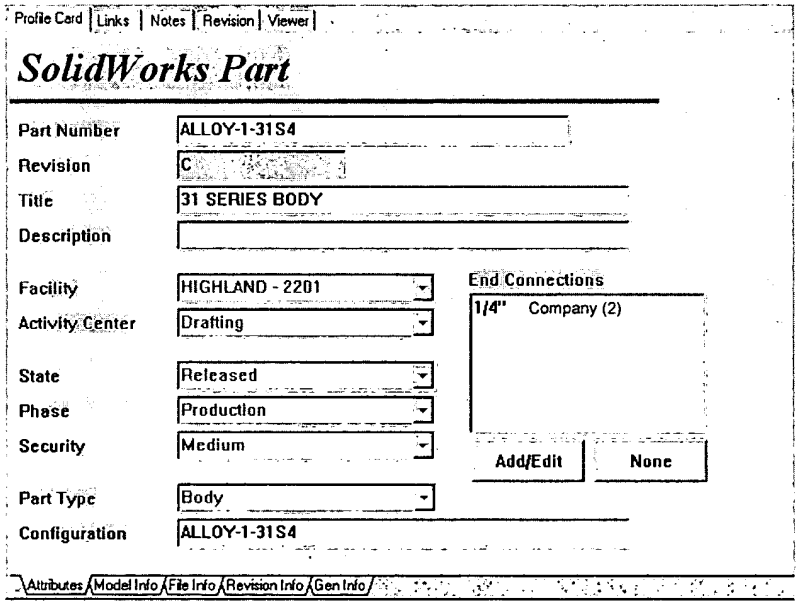

Profile Card
Links
Notes
Revision
Viewer
SolidWorks Part
Part Number
ALLOY-1-31S4
Revision
C
Title
31 SERIES BODY
Description
Facility
HIGHLAND - 2201
Activity Center
Drafting
State
Released
Phase
Production
Security
Medium
Part Type
Body
Configuration
ALLOY-1-31S4
End Connections
1/4" Company (2)
Add/Edit
None
Attributes
Model Info
File Info
Revision Info
Gen Info

FIG. 37

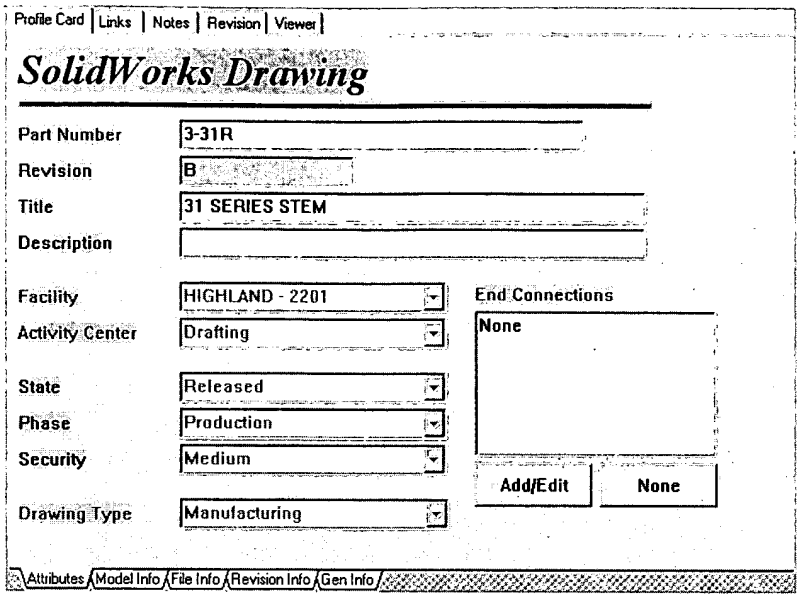

Profile Card
Links
Notes
Revision
Viewer
SolidWorks Drawing
Part Number
3-31R
Revision
B
Title
31 SERIES STEM
Description
Facility
HIGHLAND - 2201
Activity Center
Drafting
State
Released
Phase
Production
Security
Medium
Drawing Type
Manufacturing
End Connections
None
Add/Edit
None
Attributes
Model Info
File Info
Revision Info
Gen Info

FIG. 38

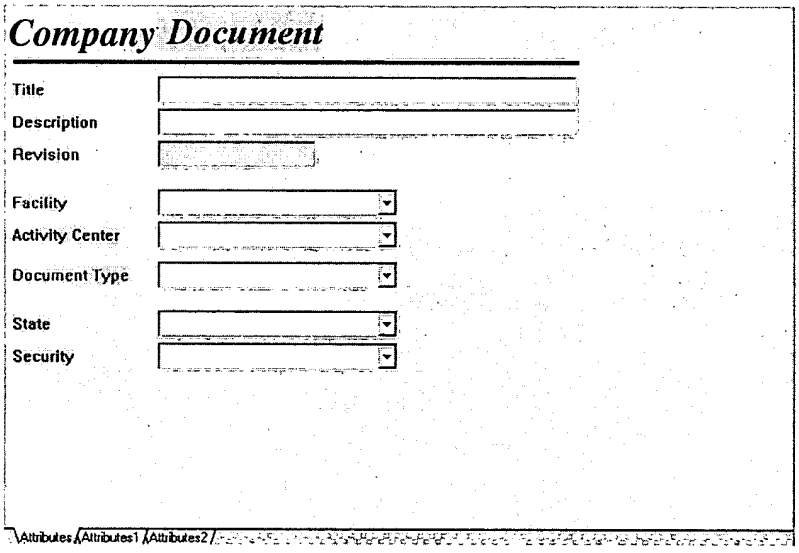

Company Document
Title
Description
Revision
Facility
Activity Center
Document Type
State
Security
Attributes
Attributes1
Attributes2

FIG. 39

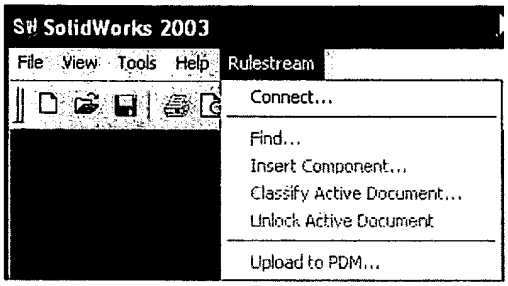

SolidWorks 2003
File View Tools Help Rulestream
Connect...
Find...
Insert Component...
Classify Active Document...
Unlock Active Document
Upload to PDM...

FIG. 40

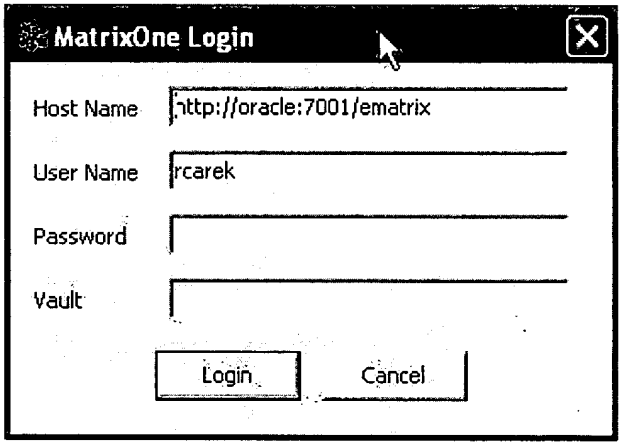

MatrixOne Login
Host Name
http://oracle:7001/ematrix
User Name
rcarek
Password
Vault
Login
Cancel

FIG. 41

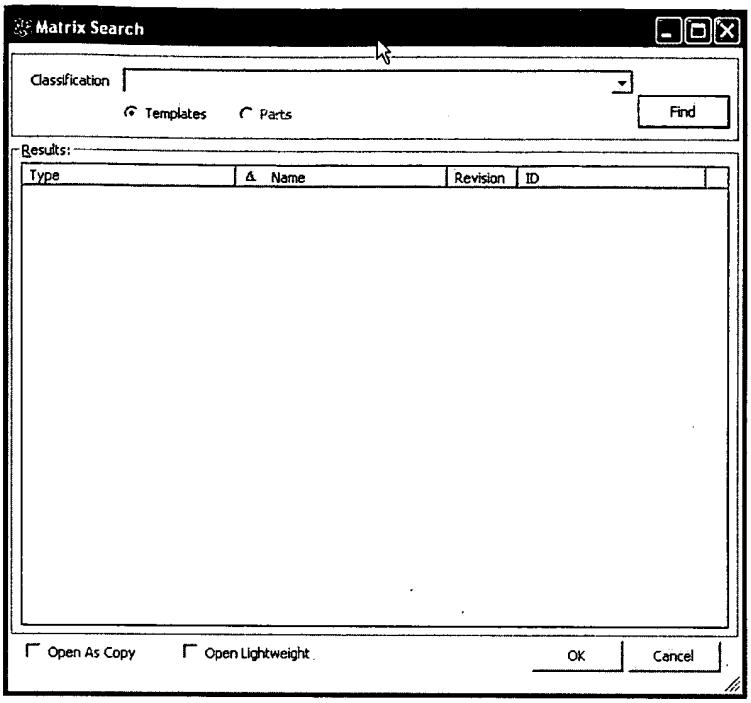

Matrix Search
Classification
Templates
Parts
Find
Results:
Type
Name
Revision
ID
Open As Copy
Open Lightweight
OK
Cancel

FIG. 42

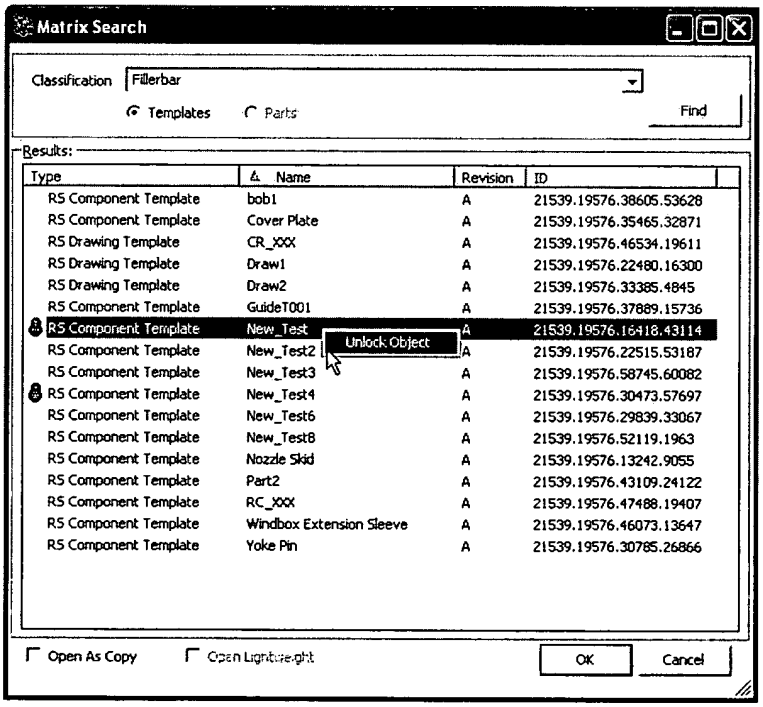

Matrix Search
Classification
Fillerbar
Templates
Parts
Find
Results:
Type
Name
Revision
ID
RS Component Template bob1 A 21539.19576.38605.53628
RS Component Template Cover Plate A 21539.19576.35465.32871
RS Drawing Template CR_XXX A 21539.19576.46534.19611
RS Drawing Template Draw1 A 21539.19576.22480.16300
RS Drawing Template Draw2 A 21539.19576.33385.4845
RS Component Template GuideT001 A 21539.19576.37889.15736
RS Component Template New_Test A 21539.19576.16418.43114
RS Component Template New_Test2 A 21539.19576.22515.53187
RS Component Template New_Test3 A 21539.19576.58745.60082
RS Component Template New_Test4 A 21539.19576.30473.57697
RS Component Template New_Test6 A 21539.19576.29839.33067
RS Component Template New_Test8 A 21539.19576.52119.1963
RS Component Template Nozzle Skid A 21539.19576.13242.9055
RS Component Template Part2 A 21539.19576.43109.24122
RS Component Template RC_XXX A 21539.19576.47488.19407
RS Component Template Windbox Extension Sleeve A 21539.19576.46073.13647
RS Component Template Yoke Pin A 21539.19576.30785.26866
Unlock Object
Open As Copy
OK
Cancel

FIG. 43

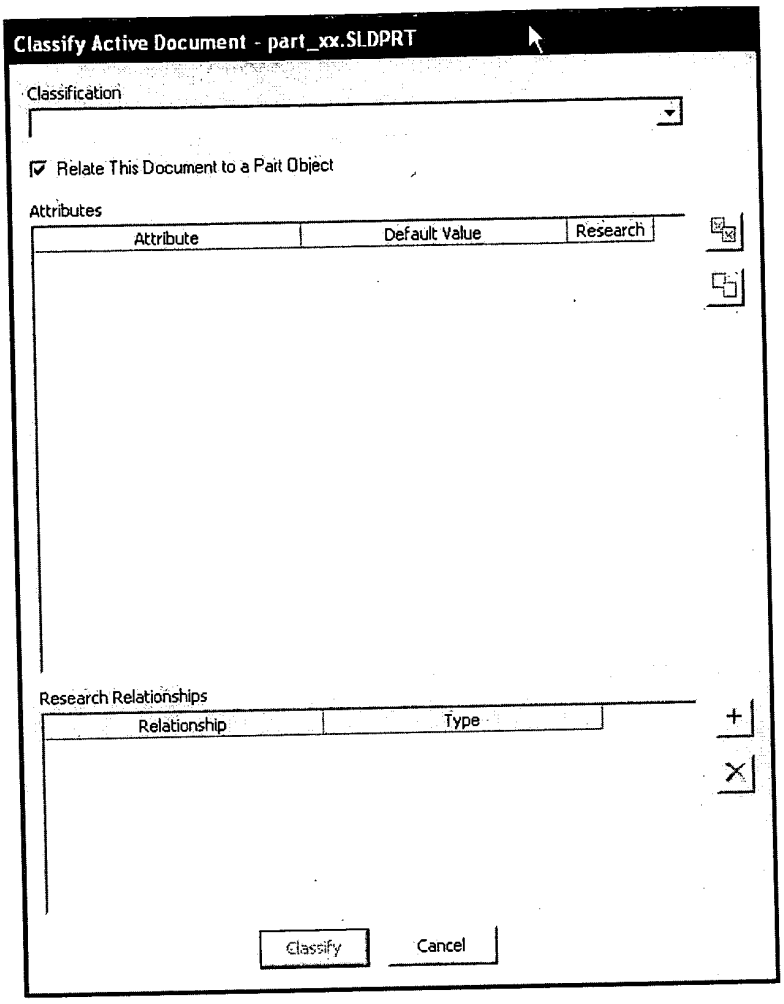

Classify Active Document - part_xx.SLDPRT
Classification
Relate This Document to a Part Object
Attributes
Attribute
Default Value
Research
Research Relationships
Relationship
Type
Classify
Cancel

FIG. 44

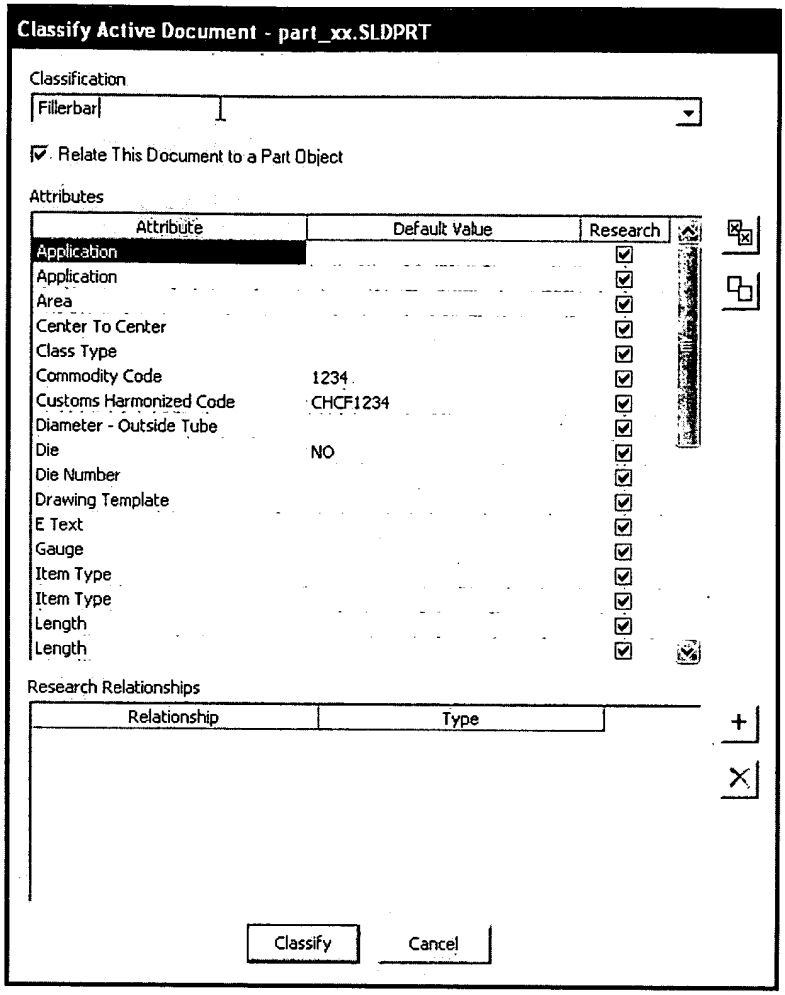

Classify Active Document - part_xx.SLDPRT
Classification
Fillerbar
Relate This Document to a Part Object
Attributes
Attribute
Default Value
Research
Application
Application
Area
Center To Center
Class Type
Commodity Code
1234
Customs Harmonized Code
CHCF1234
Diameter - Outside Tube
Die
NO
Die Number
Drawing Template
E Text
Gauge
Item Type
Item Type
Length
Length
Research Relationships
Relationship
Type
Classify
Cancel

FIG. 45

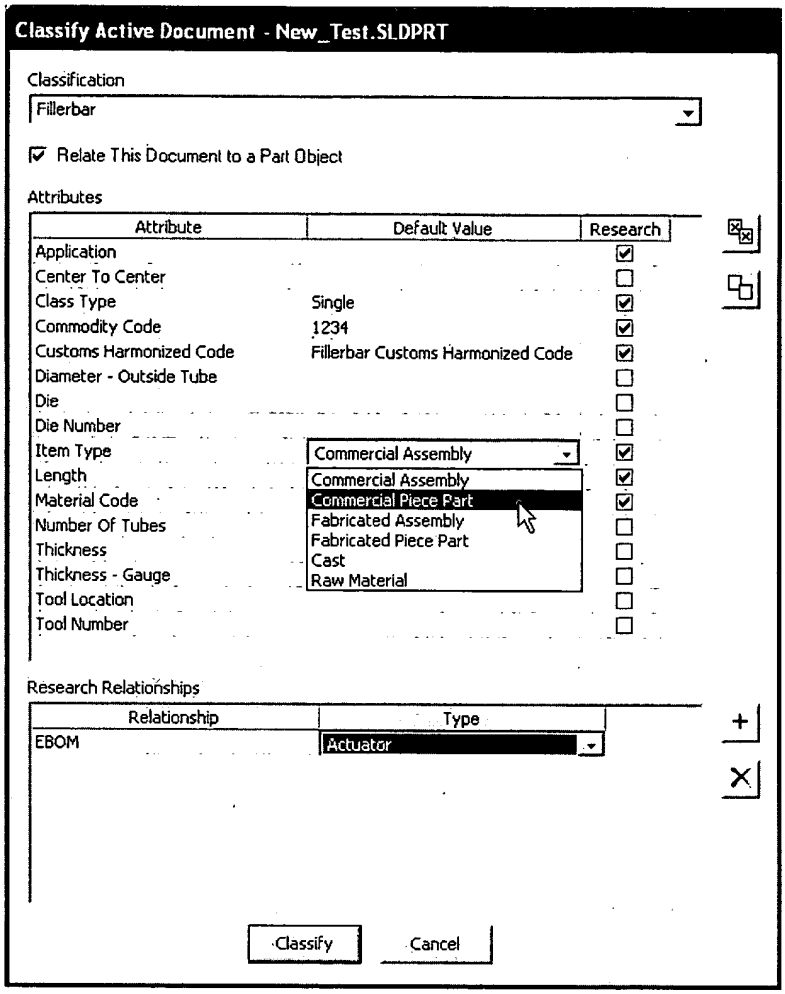

Classify Active Document - New_Test.SLDPRT
Classification
Fillerbar
Relate This Document to a Part Object
Attributes
Attribute
Default Value
Research
Application
Center To Center
Class Type
Single
Commodity Code
1234
Customs Harmonized Code
Fillerbar Customs Harmonized Code
Diameter - Outside Tube
Die
Die Number
Item Type
Commercial Assembly
Length
Material Code
Number Of Tubes
Thickness
Thickness - Gauge
Tool Location
Tool Number
Commercial Assembly
Commercial Piece Part
Fabricated Assembly
Fabricated Piece Part
Cast
Raw Material
Research Relationships
Relationship
Type
EBOM
Actuator
Classify
Cancel

FIG. 46

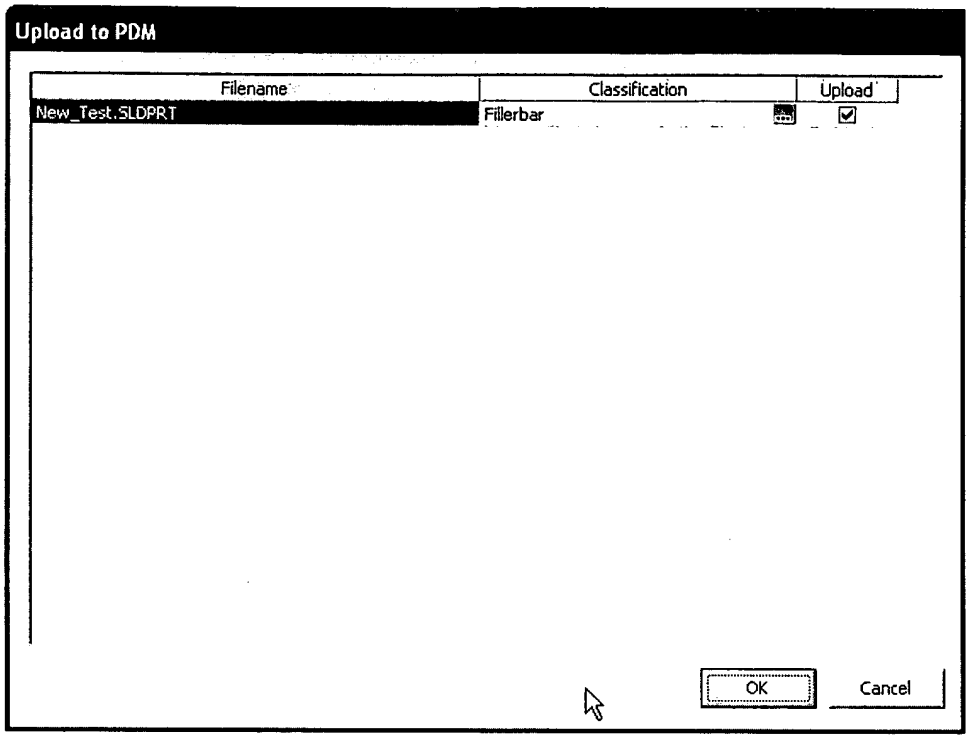

Upload to PDM
Filename
Classification
Upload
New_Test.SLDPRT
Fillerbar
OK
Cancel

FIG. 47

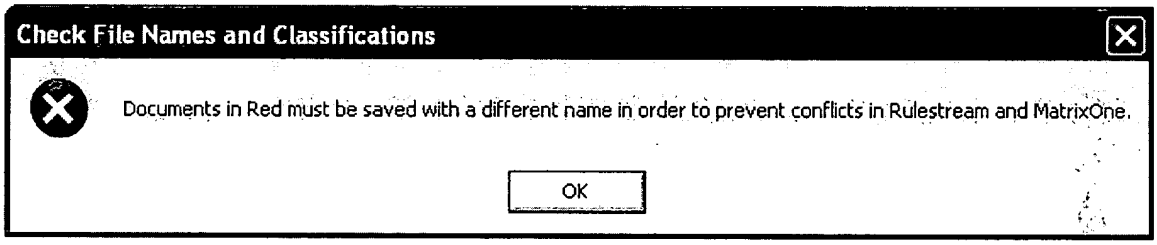

Check File Names and Classifications
Documents in Red must be saved with a different name in order to prevent conflicts in Rulestream and MatrixOne.
OK

FIG. 48

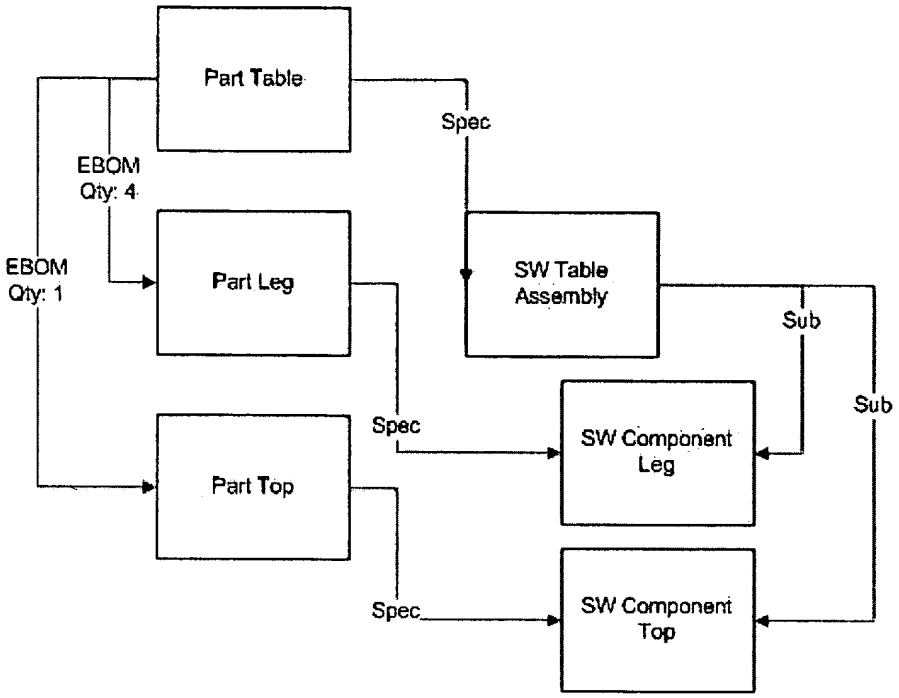

Part Table
Spec
EBOM
Qty: 4
EBOM
Qty: 1
Part Leg
SW Table
Assembly
Sub
Sub
Spec
SW Component
Leg
Part Top
Spec
SW Component
Top

FIG. 49

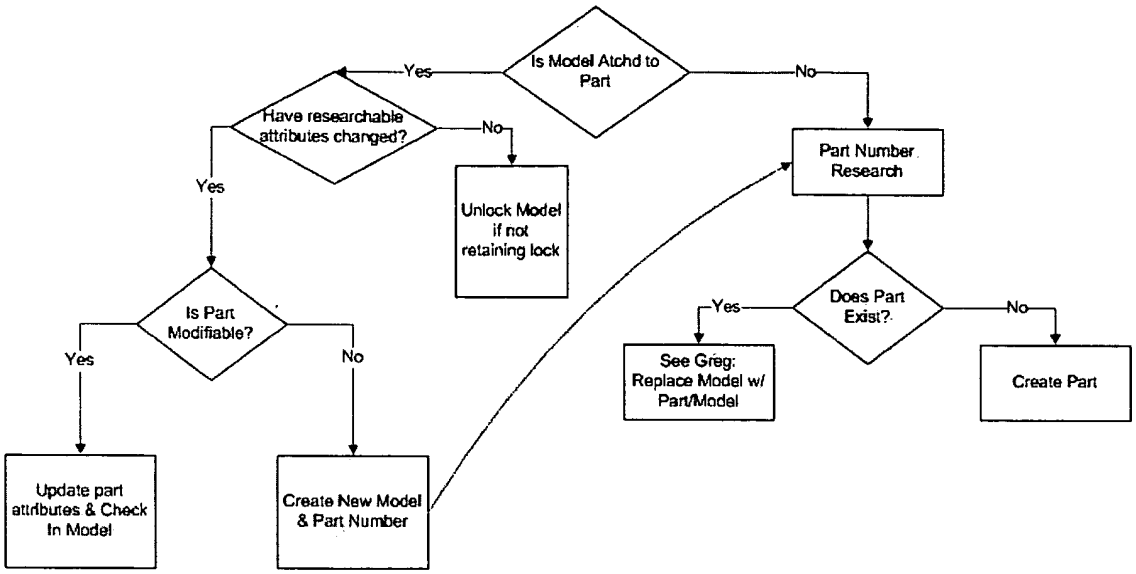

Is Model Atchd to Part
Yes
No
Have researchable attributes changed?
No
Unlock Model if not retaining lock
Yes
Part Number Research
Is Part Modifiable?
Yes
No
Does Part Exist?
Yes
No
Update part attributes & Check In Model
Create New Model & Part Number
See Greg: Replace Model w/ Part/Model
Create Part

FIG. 50

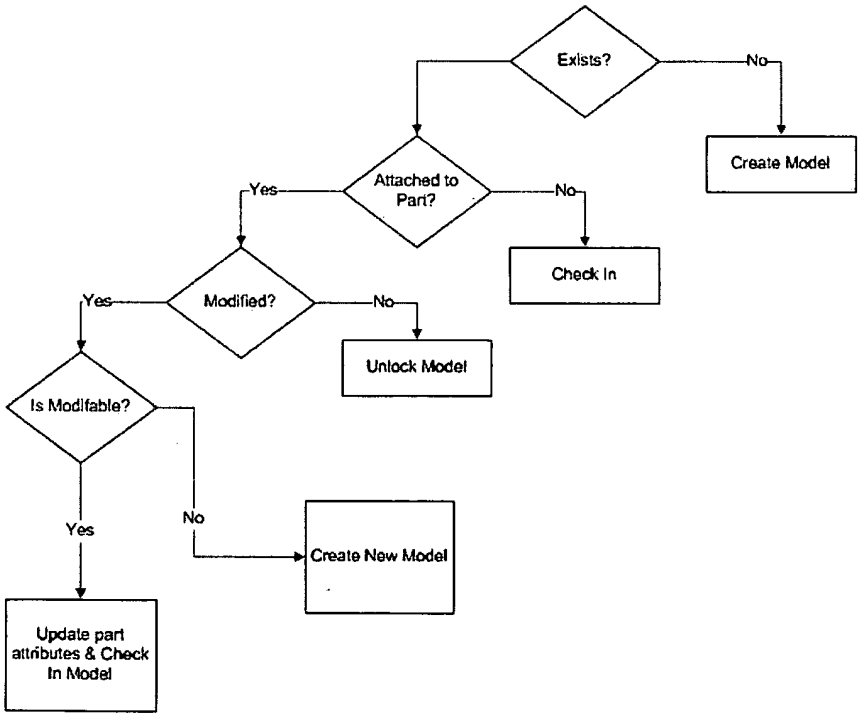

Exists?
No
Create Model
Attached to Part?
Yes
No
Check In
Modified?
Yes
No
Unlock Model
Is Modifable?
Yes
No
Create New Model
Update part attributes & Check In Model

FIG. 51